EMOTIVA

WHERE PASSION .......
AND HOME THEATRE MERGE

# DMC-1

## PROFESSIONAL AV PROCESSOR

# USER'S GUIDE

# TABLE OF CONTENTS

Safety Precautions .................................................. 8

NEC (National Electrical Code) Standards .......................... 10

A Note for the Cable Television (CATV) Installer .......................... 10

Antenna Grounding Outside the House .......................... 10

Thank You for your DMC-1 Purchase .................... 11

Unpacking the DMC-1 .................................................. 12

Recording the Serial Number .................................................. 12

Features of the DMC-1 A/V Controller .................. 13

DMC-1 Front Panel Features .................................. 14

Power Button .......................... 14

Processor Display .......................... 14

IR Receiver Window .......................... 14

Z II (Zone 2) .......................... 15

Input Select Buttons .......................... 15

AM/FM Tuner Controls .......................... 15

DIRECT Tuner Controls .......................... 15

UP/DOWN Tuner Controls .......................... 15

MODE UP/DOWN (Mode Buttons) .......................... 15

Preset Tuner Memory Buttons .......................... 15

Tone Controls .......................... 15

Signal Processing Indicator Lights .......................... 15

Additional Front Panel Features .......................................... 16

COM/RECV .......................... 16

ZONE TWO POWER .......................... 16

ZONE TWO ADJUST .......................... 16

SIDE AXIS .......................... 16

PANEL DIM Button .......................... 16

MUTE Button .......................... 16

DMC-1 Rear Panel Layout .......................................... 17

Component Video In .......................... 17

Component Video Out .......................... 17

Audio/Video Inputs .......................... 17

Audio/Video Outputs .......................... 17

Triggers and Relay .......................... 18

Infrared (IR) Inputs .......................... 18

RS-232 Port .......................... 18

8-CH Analog Input .......................... 18

Main Audio Outputs .......................... 18

XLR Audio Outputs .......................... 18

DMC-1 Rear Panel Layout (Continued)................. 19
Audio Inputs ........................................ 19
Ground Screw ........................................ 19
FM Antenna ........................................ 19
AM Antenna ........................................ 19
Side-Axis Outputs ........................................ 19
Audio Outputs ........................................ 19
Stereo Outputs ........................................ 19
IEC Line Cord Socket ........................................ 20
Digital Inputs ........................................ 20
Digital Output ........................................ 20
IEEE-1394 "Firewire" Port ........................................ 20
Installation and Connections ................................ 21
AC Power Considerations ........................................ 21
Connection Tips for Superior Sound........................................ 21
Connection Tips for Video Quality and Flexibility................ 23
What is Composite Video? ........................................ 23
What is S-Video? ........................................ 23
What is Component Video? ........................................ 23
What about HDMI? ........................................ 23
Video Up Conversion ........................................ 24
Video Output to the Main Screen and OSD ........................................ 24
Zone Specific Turn-On Triggers ........................................ 24
Connection Diagrams ........................................ 26
Connecting a DVD-Video Player (Analog Audio and Composite Video) ........................ 26
Connecting a DVD-Video Player (Digital Audio and Component Video) ........................ 27
Connecting to the TV or Projector using Component Video ........................ 28
Connecting a VCR (Analog Audio and Composite Video) ........................ 29
Connecting a CD Player (Analog Audio) ........................................ 30
Connecting a Cassette Tape or DAT Deck ........................................ 31
Connecting the 8-Channel Analog Inputs ........................................ 32
Connecting the AM and FM Antennas ........................................ 33
Connecting an Amplifier (MAIN ZONE) ........................................ 34
Connecting an Amplifier (ZONE 2) ........................................ 35
Connecting an Amplifier (ZONE 2) ........................................ 36
Overview of the DMC-1 Remote ............................ 37
Button Layout ........................................ 37
Button and Display Light ........................................ 38
DEVICE Buttons ........................................ 38
LCD Display ........................................ 38
PAGE Button ........................................ 38
MAIN Button ........................................ 38
FAV Button ........................................ 38
JOYSTICK PAD ........................................ 38

M1, M2 and M3 Macro Buttons ..... 38

**Quick Start Setup Instructions ..... 39**

Adding Batteries to the Remote Control ..... 39

Quick Start Instructions for DMC-1 Setup ..... 39

**Operation of the DMC-1 using the Remote ..... 43**

Turning on the MAIN Zone ..... 43

Turning on ZONE 2 ..... 43

**Programming and Configuring YOUR Components ..... 44**

P-PRO ..... 44

LEARN ..... 45

EDIT ..... 45

FAV ..... 46

PUNCH ..... 47

ERASE ..... 47

LIGHT ..... 47

MACRO ..... 48

RECAL (Recall) ..... 48

CLONE ..... 49

**The On-Screen Display (OSD) Functions ..... 50**

**Video Connections ..... 50**

**OSD Activation ..... 50**

Quick Access to Information ..... 50

**OSD Menus ..... 51**

How to Navigate the OSD Menus ..... 51

**TRIM Menu ..... 51**

**MODES Menu ..... 52**

Dynamic Range ..... 52

Pro Logic IIx Sub Menu ..... 52

DTS LFE ..... 52

DTS Neo:6 ..... 52

Party ..... 52

Jazz Club Ambience ..... 52

**TONE Menu ..... 53**

**INPUTS Menu ..... 53**

INPUT CONFIGURATION MENUS (The example shows the DVD menu) ..... 53

***See Note for 8-Channel Input Choices ..... 53**

**DVD INPUT Configuration Menu Example ..... 53**

Tuner Preset Menu ..... 54

Saving AM/FM Presets ..... 54

**SETTINGS Menus ..... 55**

MAIN ZONE Menu ..... 55

ZONE 2 Menu .......... 55
SETTINGS Menus (Continued) .......... 56
SPEAKERS Menu - SIZE .......... 56
SETTINGS Menus (Continued) .......... 57
SETTINGS Menus (Continued) .......... 58
SPEAKERS Menu - POSITION .......... 58
SETTINGS Menus (Continued) .......... 59
SPEAKERS Menu - CALIBRATION .......... 59
SETTINGS Menus (Continued) .......... 60
Crossover Adjustment .......... 60
Subwoofer Mode .......... 60
SETTINGS Menus (Continued) .......... 61
VIDEO Menu .......... 61
SETTINGS Menus (Continued) .......... 62
SOFTWARE Menu .......... 62
CONTROL Menu .......... 62
Special Features of the Emotiva DMC-1 .......... 63
Bass Management .......... 63
Surround Modes for 2 Channel Source Material .......... 63
Surround Modes for Multi-Channel Sources .......... 65
Tuner Operation .......... 67
Recording .......... 69
Zone 2 Operation .......... 70
Speaker Placement Tips .......... 73
Tips Before You Begin .......... 73
The Front Speakers .......... 74
The Center Speaker .......... 74
Side-Axis Speakers .......... 75
The Surround Speakers .......... 75
Surround Back Speakers .......... 76
Subwoofer Location .......... 76
Remote Control Codes .......... 78
Audio Components .......... 78
Auxiliary Devices .......... 78
Cable Boxes .......... 79
CD Players .......... 79
DVD Players .......... 80
Laserdisc Players .......... 80
Satellite/DSS Receivers .......... 80
Tape Decks .......... 81
Televisions .......... 81
VCRs .......... 82

Troubleshooting Guide .......................................... 84
No Sound (from one or more full range speakers) ........................ 84
No Subwoofer (or poor output) ........................ 84
Poor AM Reception ........................ 84
Poor FM Reception ........................ 84
Input Selection Problems ........................ 85
There is No TV Picture ........................ 85
No Tone Control Functions ........................ 85
No Dolby Digital or DTS Playback ........................ 85
No On Screen Display ........................ 85
Remote Won’t Learn Commands or Codes ........................ 86
Remote Not Working ........................ 86
ZONE 2 Not Working ........................ 86
External Amplifier(s) Shut Down (Often or Prematurely) ........................ 87
DMC-1 “Locks Up” (No Response) ........................ 87
Reset Procedure ........................ 87
Problems Updating DMC-1 Firmware ........................ 87
“Hum” Noises ........................ 88
Other Probable Causes of Noise ........................ 88
Favorite Settings Log .......................................... 89
Tone Settings ........................ 89
Main Zone Settings ........................ 89
Zone 2 Settings ........................ 89
Mode Settings ........................ 89
Control Settings ........................ 90
Video Settings ........................ 90
Input Settings and Remote Codes ........................ 91
SPEAKER Settings ........................ 91
........................ 91
Technical Specifications .......................................... 92
Licensing and Trademark Disclosures .......................................... 93
DTS Disclosure ........................ 93
Dolby Disclosure ........................ 93
Apple Disclosure ........................ 93
HDMI Disclosure ........................ 93
Emotiva Disclosure ........................ 93
Limited Warranty .......................................... 94
Service Assistance for the DMC-1 ........................ 94

# Safety Precautions

Read this Owner's Guide thoroughly before attempting to install and configure the Emotiva DMC-1 Media Center. All the safety and operation instructions should be read before any operation of the component(s) begin. After successful installation and configuration of the Emotiva DMC-1 Media Center, be sure to retain this manual in a safe place for any future reference needs.

All warnings on the Emotiva DMC-1 Media Center and in these operating instructions should be followed. Safety is a key component to a long lasting and trouble free installation. The vast majority of the subsequent safety precautions involve simple common sense. If you are not comfortable with the installation of audio/video entertainment equipment, it will be to your benefit to seek the services of a qualified installation professional.

- *The Emotiva DMC-1 Media Center should NEVER be used near water such as a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.*
- *The Emotiva DMC-1 Media Center should be situated so that its location or installation position does not interfere with proper ventilation.*
- *The Emotiva DMC-1 Media Center should not be situated on a bed, sofa, rug, or similar surface that may block any ventilation openings; or placed in a built-in installation such as a bookcase, cabinet, or closed equipment rack that may impede the flow of air through ventilation openings. If installed in a closed equipment rack for custom installations, be sure to add forced air ventilation so that it has adequate air circulation.*
- *The Emotiva DMC-1 Media Center should be situated away from heat sources such as radiators, or any other devices which produce heat.*
- *The Emotiva DMC-1 Media Center should be connected to a power supply only of the type described in this Owner's Guide and what is labeled on the DMC-1 component. Power supply cords should be routed so that they are not in high foot traffic areas or pinched by items placed upon or against them, paying particular attention to cords at the wall plugs, convenience receptacles, and the point where they connect into the DMC-1 Media Center. The power cord of the DMC-1 Media Center should be unplugged from the outlet when unused for a long period of time.*

When it's time for cleaning the Emotiva DMC-1 Media Center, it should be cleaned only as recommended in this Owner's Guide. Never spray liquids directly into the component's vent openings. Care should be taken so that small objects do not fall into the inside of the DMC-1 Media Center.

The following situations require your Emotiva DMC-1 Media Center is serviced only by qualified service personnel:

1. *The power-supply cord or the plug has been damaged; or*
2. *Objects have fallen, or liquid has spilled into the component; or*
3. *The DMC-1 has been exposed to rain; or*
4. *The DMC-1 does not appear to operate normally or exhibits a marked change in performance; or*
5. *The DMC-1 has been dropped, or its enclosure or chassis is damaged.*

The user should not attempt to service the DMC-1 Media Center beyond the means described in this Owner's Guide. All other servicing should be referred to qualified service personnel.

**To prevent electric shock,** do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

*Pour preevenir les chocs electriques ne pas utiliser cette fiche polarises avec un prolongateur, un prise de courant ou une autre sortie de courant, sauf si les lames peuvent titre inserees a fond sans laisser aucune parllle a decouvert.*

**Grounding or Polarization —** Precautions should be taken so that the grounding or polarization means of the component is not defeated.

This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

*ATTENTION — Le present appareil numerique n'emet pas de bruits radioelectriques depassant las limites applicables aux appareils numeriques de class A/de class B (selon le cas) prescrites dans le reglement sur le brouillage radioelectrique edicts par les ministere des communications du Canada.*

For questions regarding service, please contact:

**Emotiva**
**106 Mission Court, Suite 101**
**Franklin, TN 37067**
**Tel - (615) 771-1224 (877) EMO-TECH**
**Fax - (615) 771-1128 www.emotiva.com**

If you purchased your DMC-1 from AV123, please contact them directly for service or technical questions. They can be reached at (877) 543-7500 or support@av123.com.

**WARNING –** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**ATTENTION:** POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

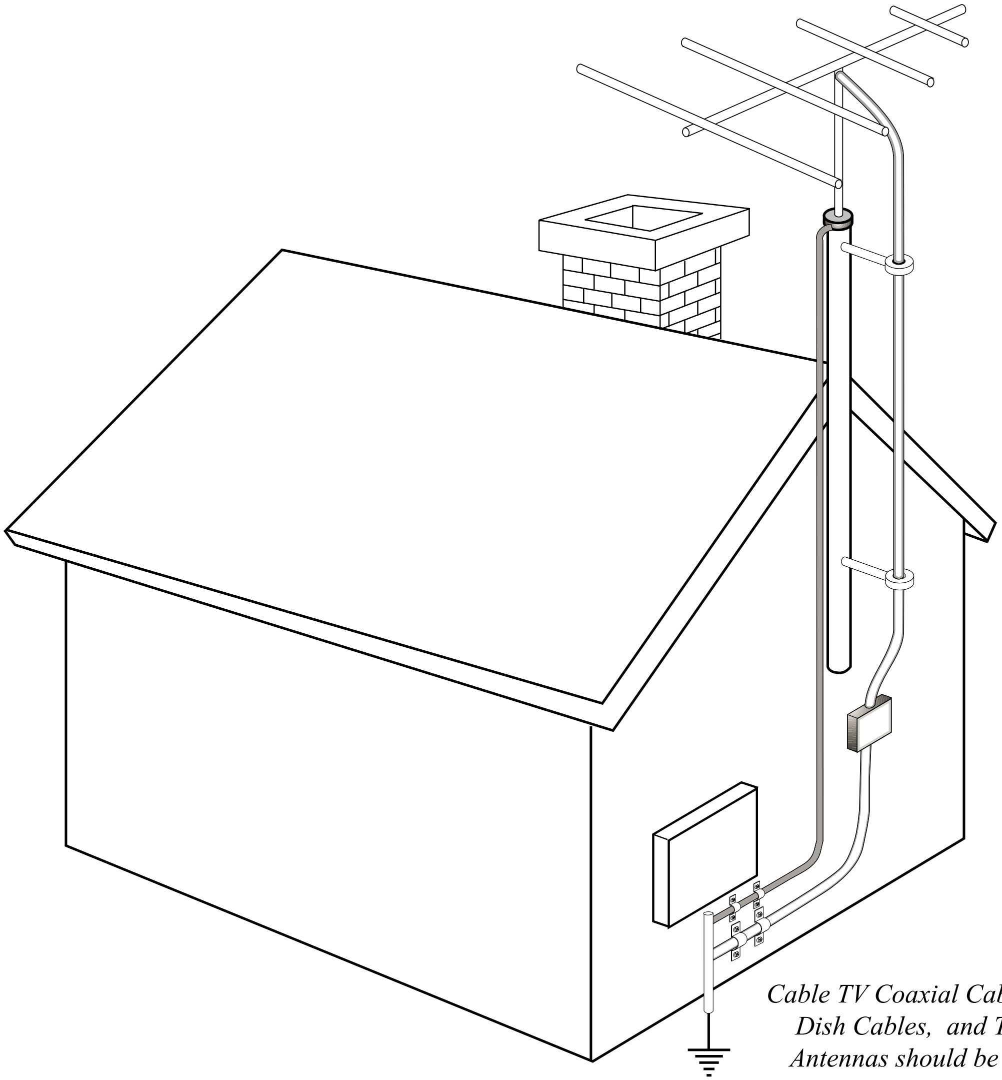
# NEC (National Electrical Code) Standards

### A Note for the Cable Television (CATV) Installer

This reminder is to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and in particular, specifies that the cable ground shall be connected to the grounding system of the building as close to the point of cable entry as practical.

### Antenna Grounding Outside the House

If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the lead-in wire to an antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See diagram below.



*Cable TV Coaxial Cable, Satellite Dish Cables, and Television Antennas should be grounded BEFORE the point of entry into the house.*

# Thank You for your DMC-1 Purchase

Dear Home Entertainment Enthusiast,

Thank you for purchasing the Emotiva DMC-1 Digital Media Controller. We sincerely believe that it offers you outstanding performance and value. Emotiva products are engineered and produced with the highest quality materials and incorporate the latest technology. We think you will find the Emotiva DMC-1 meets or exceeds your expectations.

The Emotiva DMC-1 is unlike any home entertainment product on the market. It has been designed with the user in mind. By employing technology that makes sense, the Emotiva DMC-1 does most of the thinking for you. This allows you to spend more time enjoying various audio and video sources without requiring an engineering degree to operate the component. What's more, the Emotiva DMC-1 does it all with exceptionally refined cosmetics and a sound quality that will satisfy even the most discriminating tastes.

The Emotiva DMC-1 features an array of leading edge technologies and all the features necessary to perform the functions expected of a high end Digital Media Controller.

The Emotiva DMC-1 Digital Media Controller is an intuitive component that allows you to control and manage all of your system's audio and video devices from a single, easy-to-use control center. This makes enjoying your home entertainment system much easier than operating complicated components with multiple remotes or other confusing procedures. At Emotiva, we remember that creating home audio/video products means that they should be easy to use while delivering unparalleled performance.

# Unpacking the DMC-1

The Emotiva DMC-1 Preamplifier and A/V Controller should reach you in flawless condition. If you notice any shipping damage or other issues upon unpacking the unit, please contact your Emotiva Retailer immediately.

Gently lift out the unit and remove all the packing material and accessories. It is important to save all the packing materials and the box in case your Emotiva DMC-1 ever needs to be moved or shipped back to the factory for service.

Make sure that you keep your sales receipt. It is the only way for Emotiva to establish the duration of your Limited Warranty and it may be useful for insurance purposes.

Please take a moment to fill out and mail the Emotiva Customer Response card.

## Recording the Serial Number

Please read the serial number located on the rear panel and record it below. Also record the place where you purchased this product and the date of purchase.

**Model Number** DMC-1

**Serial Number** ______________________

**Place of Purchase** ______________________

______________________________________

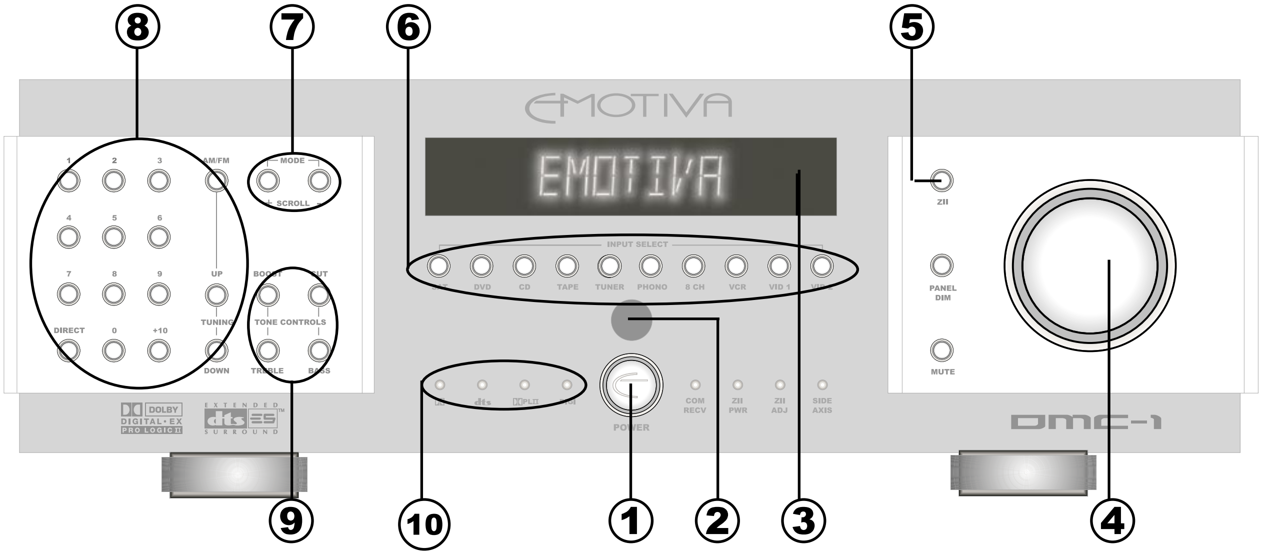
______________________________________

**Date of Purchase** ______________________

# Features of the DMC-1 A/V Controller

- *24-bit Crystal Semiconductor® Analog to Digital converter*
- *24-bit, 192 kHz Analog Devices® Digital to Analog converters*
- *32-bit, 20 MHz control microprocessor*
- *24-bit, 150 MIPS Motorola Symphony™ DSP processor*
- *AM/FM tuner with 40 presets*
- *Digital Domain Treble and Bass tone controls*
- *Dolby Digital EX®, Dolby Pro Logic II®, and Pro Logic IIx® decoding modes*
- *DTS ES® and DTS NEO:6® decoding modes*
- *DSP "simulated" surround mode for enhancement of two channel sources*
- *Supports all digital sampling rates to 96 kHz*
- *Direct 2-channel analog bypass mode*
- *Gold plated input and output connectors*
- *Balanced XLR outputs and unbalanced RCA outputs*
- *Six A/V inputs, each with audio, S-video and composite video*
- *Three A/V outputs, each with audio, S-video and composite video*
- *8 channel analog input with separate RCA connectors for DVD-Audio format*
- *Three component video inputs and two component video outputs*
- *Automatic video format transcoder up converts Composite and S-Video source to Component Video*
- *Six coaxial and four optical digital inputs*
- *Coaxial and optical digital outputs (including from analog and downmixed 5.1 sources)*
- *Three audio only inputs, including MM Phono*
- *Two Tape record outputs*
- *Record outputs feature down mixed 2 channel output from a 5.1 digital source*
- *Four subwoofer outputs*
- *7.1 channel outputs plus stereo side outputs for a total of 9.1 channels*
- *"Party Mode" for 2 channel playback through all speakers*
- *Zone 2 can play sources independent of the Main Zone*
- *Trigger outputs for both zones*
- *IR control of both zones, with rear IR ports and discrete codes*
- *On Screen Display (OSD)*
- *Flash memory upgradable through RS-232 port*
- *IEEE 1394 "Fire Wire" port for future expansion*
- *RS-232 control port with discrete codes*
- *Steel chassis with milled aluminum "floating wing" faceplate and cobalt blue illumination*
- *IEC standard 2 prong removable power cord*

# DMC-1 Front Panel Features


8
7
6
5
EMOTIVA
1
2
3
AM/FM
MODE
SCROLL
4
5
6
7
8
9
UP
BOOST
CUT
TUNING
TONE CONTROLS
DIRECT
0
+10
DOWN
TREBLE
BASS
INPUT SELECT
DVD
CD
TAPE
TUNER
PHONO
8 CH
VCR
VID 1
POWER
COM RECV
ZII PWR
ZII ADJ
SIDE AXIS
ZII
PANEL DIM
MUTE
DOLBY DIGITAL EX PRO LOGIC II
dts ES EXTENDED SURROUND
DMC-1
9
10
1
2
3
4

### ① Power Button

This turns the DMC-1 on or off. It is a non-latching momentary button. If you press **Z II** first, it can turn on Zone 2 (even if the Main Zone is off).

*IMPORTANT – Please note the DMC-1 requires initialization after the power cord is plugged into the AC receptacle. Push and hold the power button for approx. 5 seconds. The unit will power up after this small delay. The second push of the power button will turn the unit off and after this the unit will turn on and off in a normal fashion.*

### ② IR Receiver Window

This window should be clean and free from obstruction for the remote control to work correctly.

### ③ Processor Display

This soothing blue display shows which input is selected, the tuner frequency, volume level, and other useful information.

④ Rotate this manual control clockwise to increase the volume. The dB level will appear in the front panel display. When turning on a new source, make sure the level is low, such as -80 dB and increase it slowly. The dB display becomes less negative as the volume increases.The DMC-1 volume control is velocity sensitive. If turned slowly, the volume will change in small increments. If rotated quickly, level change will be made in larger increments.

*Note: When the DMC-1 is turned on, it has a deliberately slow and smooth volume ramp from silence, up to the level that was set when the unit was last turned off. It can also be programmed to come up to a preset volume you have selected, rather than the previous volume.The knob does not turn when volume is operated from the DMC-1 remote.*

### ⑤ Z II (Zone 2)

Any changes you make after pressing this, will affect Zone 2 and not the Main Zone. For example, press **Z II**, then **POWER** to turn on Zone 2, then adjust the Volume and select an input. Press **Z II** again to revert back to Main Zone operation. It will also revert back after a short period of no activity.

*Note: If Zone 2 has not been enabled this button has no effect. The unit is shipped with Zone 2 disabled.*

### ⑥ Input Select Buttons

Use these controls to select the source that you want to listen to and/or view. Using the On Screen Display (OSD) INPUTS menu, each input can be adjusted in level so that all the inputs have similar volumes. Each input can also be set to enter a desired surround mode whenever that input is selected.

*Note: After you have selected an input, you should check that the DMC-1 is set to the desired surround mode (or the stereo mode).*

### ⑦ MODE UP/DOWN (Mode Buttons)

These buttons allow you to step up or down through the various sound playback modes.

### ⑧ AM/FM Tuner Controls

The AM/FM button toggles between the AM or FM band. Press and hold it to scan of the station presets. Press it again or press a preset button to stop the scan.

#### *DIRECT Tuner Controls*

Use this to enter a station's frequency directly using the 0 - 9 keys, such as 9, 3, 9 for 93.9 MHz.

#### *UP/DOWN Tuner Controls*

Switch to stations above or below the frequency of the current station. If repeatedly pressed, the tuner will move up or down one frequency step each time. If held down for a second or more, the tuner will automatically keep tuning stations. Press **UP** or **DOWN** once again to stop when it reaches a station you like.

#### *Preset Tuner Memory Buttons*

1-9, 0, +10 -These buttons are used to directly select your favorite stations, previously stored as presets.

### ⑨ Tone Controls

To change the tone, first press BASS or TREBLE and then press UP or DOWN to suit your taste. The display will show the change in dB level for reference. The range for both BASS and TREBLE is +/- 10 dB in steps of 1 dB. The unit returns to its normal display after a few moments of inactivity, and any level changes are retained.

The BASS and TREBLE levels can also be adjusted using the OSD TONE Menu and the remote control.

*Note: The Tone controls do not affect the LFE channel, or the 8-Channel analog input.*

### ⑩ Signal Processing Indicator Lights

***DOLBY DIGITAL***

This light is on when a Dolby Digital signal is being decoded.

***DTS***

This light is on when a DTS signal is being decoded.

***DOLBY PRO LOGIC IIx***

This light is on when the Dolby Pro Logic II or Pro Logic IIx mode is engaged.

***DIGI***

This light is on when a digital audio signal is being decoded.

# Additional Front Panel Features

## COM/RECV

This light pulses to verify front panel volume LEVEL or INPUT SELECTOR commands are being sensed, or that the remote control commands are being sensed.

## ZONE TWO POWER

This light is on when Zone 2 is turned on.

## ZONE TWO ADJUST

This light is on when Zone 2 is being adjusted.

## SIDE AXIS

This light is on when the sideaxis outputs are enabled.

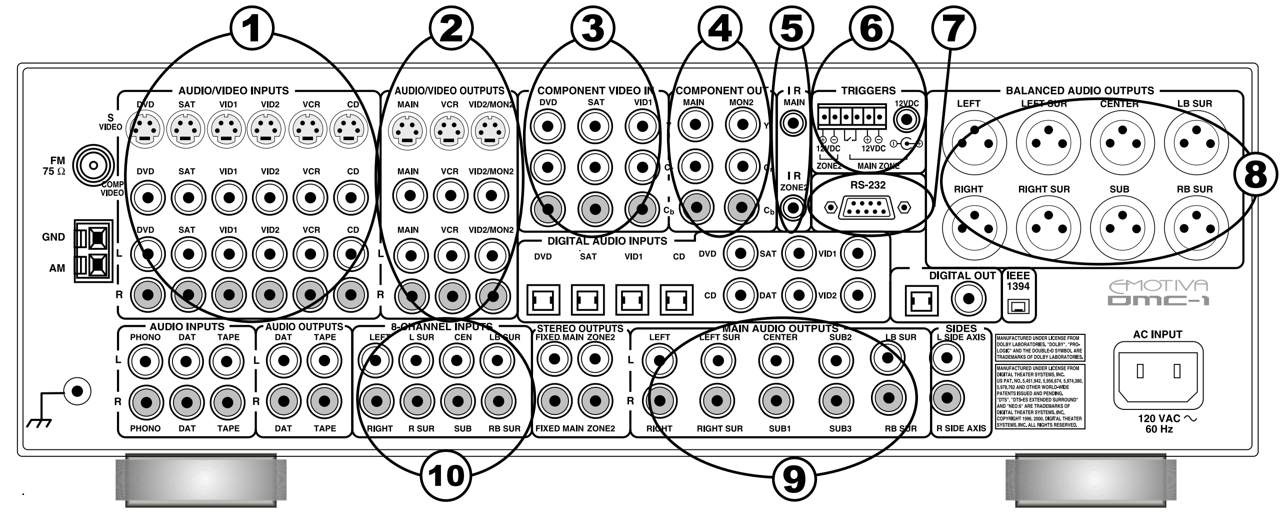
## PANEL DIM Button

The front panel lights have four levels: bright, medium, low and off (low intensity display with all illumination off).

## MUTE Button

This turns off the sound. Press it again, or adjust the volume control to return to the previous volume level.

# DMC-1 Rear Panel Layout


1
2
3
4
5
6
7
8
9
10
AUDIO/VIDEO INPUTS
S VIDEO
DVD SAT VID1 VID2 VCR CD
FM 75 Ω
COMP VIDEO
GND
AM
L
R
AUDIO/VIDEO OUTPUTS
MAIN VCR VID2/MON2
COMPONENT VIDEO IN
DVD SAT VID1
COMPONENT OUT
MAIN MON2
Y
Cr
Cb
I R MAIN
I R ZONE2
TRIGGERS
12VDC
ZONE2 MAIN ZONE
RS-232
BALANCED AUDIO OUTPUTS
LEFT LEFT SUR CENTER LB SUR
RIGHT RIGHT SUR SUB RB SUR
DIGITAL AUDIO INPUTS
DVD SAT VID1 CD
DAT VID2
DIGITAL OUT
IEEE 1394
EMOTIVA DMC-1
AUDIO INPUTS
PHONO DAT TAPE
AUDIO OUTPUTS
DAT TAPE
8-CHANNEL INPUTS
LEFT L SUR CEN LB SUR
RIGHT R SUR SUB RB SUR
STEREO OUTPUTS
FIXED MAIN ZONE2
MAIN AUDIO OUTPUTS
LEFT LEFT SUR CENTER SUB2 LB SUR
RIGHT RIGHT SUR SUB1 SUB3 RB SUR
SIDES
L SIDE AXIS
R SIDE AXIS
AC INPUT
120 VAC ~ 60 Hz

## ① Audio/Video Inputs

These Audio, Component Video, Composite-Video and S-Video inputs connect to the outputs of your audio video components. When these inputs are selected, the audio will be heard in your system and the video will be seen on the TV screen. VID2 can be used for a second VCR.

## ③ Component Video In

These inputs connect to the component-video outputs of your DVD, SAT or other video source (VID1) if they have this advanced capability. When these inputs are selected, the DMC-1 will automatically route any video signals going into these jacks to the component video outputs. Note that component video provides the best picture compared to composite or S-Video. The DMC-1 can also route HDTV signals.

## ② Audio/Video Outputs

**MAIN**: connects to the inputs of a TV monitor, where the video of any selected input and the On Screen Display (OSD) can be viewed. The audio connections allow you to listen to any selected audio source through your TV's speakers.

**VCR**: connects to the inputs of a VCR to allow recording.

**VID2/MON2**: connects to the input of a second VCR for recording, or to a second TV. When configured in the OSD for "VID2," this output is muted whenever the VID2 input is selected. This prevents feedback; also there is no OSD then on this output. When configured for "MON2," the output is always active, the same as the Main output.

*Note: Analog audio signals are present at these L and R outputs even if a digital input has been selected. The output is a 2 channel down mix if the digital source has more than 2 channels.*

## ④ Component Video Out

If your TV Monitor has component video inputs, connect them to these outputs. If you select DVD, SAT or VID1, then any video signals going to the component inputs, will pass through to your TV monitor. The DMC-1 can also up convert any Composite Video or S-Video signals from the other inputs to Component Video.

### ⑤ Infrared (IR) Inputs

These are used in custom installations to control the Main Zone and Zone 2 from a remote location. The input accepts 1/8" mono mini-jacks from standard remote control IR equipment, such as those made by Xantech and other companies. The remote sensors can be in a different room, or in a preferred location in your main room.

### ⑥ Triggers and Relay

The relay switch is normally open, and it will close after a short delay, when selecting a source. This can be used in installations to trigger video screen deployment, or other custom purposes. The OSD INPUTS menu allows you to choose which inputs will activate the relay. The +12 VDC outputs are on whenever their zone is enabled. Emotiva amplifiers have a +12 VDC input which allows them to be turned on automatically by the DMC-1. The 1/8" mini-jack is wired in parallel with the terminals. Do not exceed a current draw of 500 mA total for both outputs.

### ⑦ RS-232 Port

This connects to the serial port of a home or laptop computer, allowing the DMC-1 flash memory software to upgraded. The latest software can be downloaded from the EMOTIVA website. It also allows connection of an optional control device intended to be installed in a remote location or the HDMI switcher.

### ⑧ XLR Audio Outputs

These line-level balanced XLR outputs connect to the XLR inputs of your amplifiers and powered subwoofer. The outputs are: front left, front right, center, left surround, left surround back, right surround back, right surround and one subwoofer (LFE) output. If your amplifier has a choice of inputs, we recommend using the XLR balanced type. This gives better noise rejection, especially for longer cable runs.

### ⑨ Main Audio Outputs

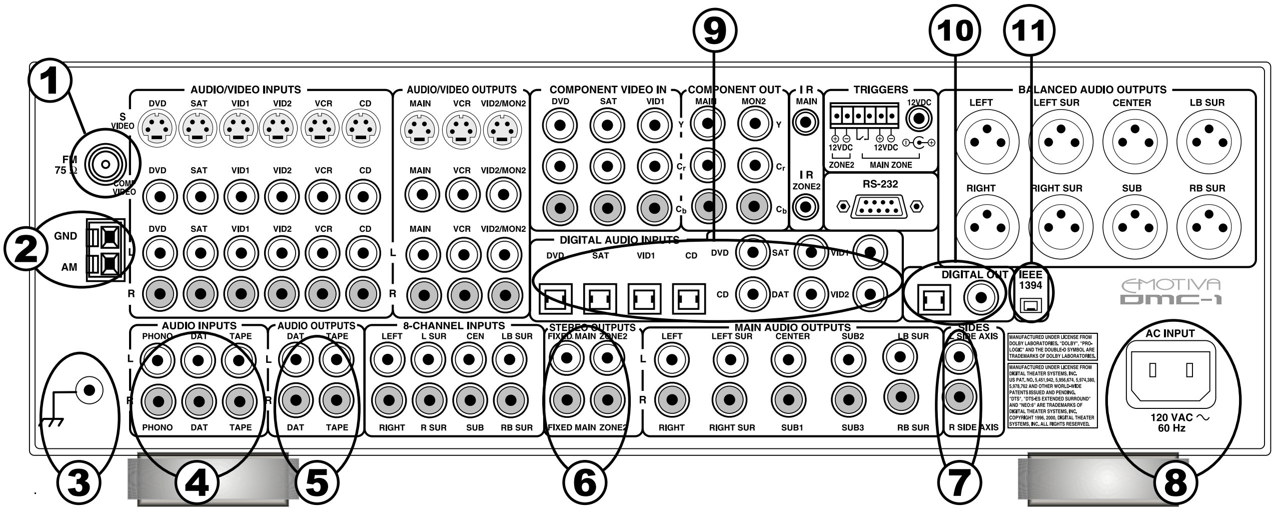
These line-level RCA outputs connect to the inputs of your amplifiers and powered subwoofer(s). There are outputs for front left, front right, center, left surround, left surround back, right surround back, right surround and three identical subwoofer (LFE) outputs.

### ⑩ 8-CH Analog Input

These analog audio inputs can connect to the output of an external surround processor, or a source component such as DVDAudio, SACD, or a DVD player with its own surround decoder. You can select this as an input from the front panel or remote control. The eight channels of analog audio will then pass into the DMC-1

*Note: This is designed to be a very short, ultra pure, analog-only signal path. DSP-based effects such as tone controls, bass management and DSP surround are bypassed in order to maintain the highest fidelity. This input is not available in Zone 2.*

# DMC-1 Rear Panel Layout (Continued)


1
2
3
4
5
6
7
8
9
10
11
AUDIO/VIDEO INPUTS
DVD SAT VID1 VID2 VCR CD
S VIDEO
COMP VIDEO
FM 75 Ω
GND
AM
AUDIO/VIDEO OUTPUTS
MAIN VCR VID2/MON2
COMPONENT VIDEO IN
COMPONENT OUT
MAIN MON2
Y Cr Cb
I R
MAIN
ZONE2
TRIGGERS
12VDC
MAIN ZONE
RS-232
DIGITAL AUDIO INPUTS
DVD SAT VID1 CD DAT VID2
DIGITAL OUT
IEEE 1394
BALANCED AUDIO OUTPUTS
LEFT LEFT SUR CENTER LB SUR
RIGHT RIGHT SUR SUB RB SUR
EMOTIVA DMC-1
AUDIO INPUTS
PHONO DAT TAPE
AUDIO OUTPUTS
DAT TAPE
8-CHANNEL INPUTS
LEFT L SUR CEN LB SUR
RIGHT R SUR SUB RB SUR
STEREO OUTPUTS
FIXED MAIN ZONE2
MAIN AUDIO OUTPUTS
LEFT LEFT SUR CENTER SUB2 LB SUR
RIGHT RIGHT SUR SUB1 SUB3 RB SUR
SIDES
L SIDE AXIS
R SIDE AXIS
AC INPUT
120 VAC ~ 60 Hz

### ① FM Antenna

The supplied FM antenna fits this "F-type" screw-on connector. Other antennas can be fitted for improved reception.

### ② AM Antenna

These connections are for the included AM loop antenna.

### ③ Ground Screw

This is commonly used for the ground connection wire of a turntable, to prevent any hum in your speakers. It is tied to the chassis ground, and may be used as needed.

*Note: It is not necessary or desirable to connect this to an electrical ground.*

### ④ Audio Inputs

These audio inputs connect to the outputs of your turntable, DAT or TAPE player. Any standard audio component with a line-level output can be connected to DAT or TAPE. Only a turntable with a moving-magnet, or high-output moving coil cartridge can be connected to the PHONO input.

### ⑤ Audio Outputs

These audio outputs connect to the analog record inputs of your tape decks, such as DAT, cassette or reel to reel. These outputs allow you to record the selected audio program. Note that these also allow analog recording from digital audio sources.

### ⑥ Stereo Outputs

FIXED MAIN is a line level output, and the volume is not adjustable. This can be used as a record output, or to feed another audio system. ZONE 2 connects to the inputs of a stereo amplifier to run Zone 2. The volume and source are adjustable, either from the front panel, or from a remote IR sensor.

### ⑦ Side-Axis Outputs

These outputs provide two optional front side channels to complement the left, center, right, surround and surround back channels. They can be turned on or off using the Speaker Size OSD menu (see page 56).

### ⑧ IEC Line Cord Socket

The DMC-1 comes with a detachable line cord which connects here. Plug the line cord into an AC wall socket or power strip which is correctly configured with the voltage and current supply specified for the DMC-1.

### ⑨ Digital Inputs

These inputs connect to the digital outputs of your audio/video components. The DVD, SAT and VID1 and CD inputs have two options, optical or coaxial. The DAT and VID2 inputs are coaxial only. Whenever one of these inputs is selected from the front panel or remote, the DMC-1 will automatically select the digital input if there is a signal present, otherwise it will select the corresponding analog input.

### ⑩ Digital Output

This S/PDIF output is active for all sources except the 8-channel input. It allows you to record digital audio, for example to a DAT or CD-R.

### ⑪ IEEE-1394 “Firewire” Port

This connection is for future expansion and accessories.

# Installation and Connections

Observe the following precautions when choosing a location for your Emotiva DMC-1:

*1) Protect it from prolonged exposure to direct sunlight and other direct sources of heat, such as heating vents and radiators.*

*2) Do not expose the unit to rain or moisture. If fluid or a foreign object should enter the unit, immediately turn off the power and contact your Emotiva Dealer.*

*3) Avoid excessive exposure to extreme cold or dust.*

*4) Do not place heavy objects on top of the unit.*

*5) If you need to clean the front surface, first turn off the power and then use a soft dry cloth, rubbing with the grain. Be careful not to scratch the display window.*

## AC Power Considerations

Ensure that the unit is plugged into an outlet capable of supplying the correct voltage and current specified for your model. Remember to account for the electrical power that other components will require if they share a common wall socket. The majority of household electrical sockets in places other than the kitchen and garage are 15 amperes maximum. Most DVD players and other source components are fairly low current items. The Emotiva DMC-1 requires a minimum of 2 amperes @ 120 volts. It should be sufficient to allow the DMC-1 to share a wall socket with other video source units, but power amplifiers and a video display (big screen TV or video projector) should each be provided a SEPARATE electrical connections on a SEPARATE circuits. This configuration yields the most stable power supply in any home theater application, regardless of your equipment choices.

*IMPORTANT – Please note the DMC-1 requires initialization after the power cord is plugged into the AC receptacle. Push and hold the power button for approx. 5 seconds. The unit will power up after this small delay. The second push of the power button will turn the unit off and after this the unit will turn on and off in a normal fashion.*

Refer to your power amplifier and video display owner's manuals to learn the power requirements so you can safely plan your electrical power requirements for your home entertainment system.

## Connection Tips for Superior Sound

Before setting up your new system, please consider the following:

- Whenever possible, route the power cords away from the signal cables or speaker wires to prevent any hum or interference heard in the speakers.
- Use quality coaxial digital cables to connect the DMC-1 to any source equipment which has coaxial digital outputs. Optical cables transmit only light pulses and are much more immune to noises, but are sensitive to excessive bends. Whichever you choose, follow the cable manufacturer's recommendations.
- Many RCA type patch cords can be a very tight fit and there is usually a preferred method of getting

them off. Some have to be removed with a twisting action. Be gentle or you may damage the jacks of your DMC-1, or other components.

- Many audiophile signal cables are intended to be hooked up in one direction. If this is the case the cables will be marked with arrows the direction of signal flow.
- It is usual for the right channel RCA patch cord plugs to be red and the left channel connections to be white, grey, or black (depending on the cable brand). RCA connectors that are gold will be designated with a colored band to designate the channel.
- If the amplifier to which you will connect the DMC-1 features balanced XLR inputs, use the DMC-1's XLR balanced outputs instead of RCA type patch cords. Balanced signal transmission between audio components provides superior rejection of hum and noise, especially if long cables are required.

# Connection Tips for Video Quality and Flexibility

The Emotiva DMC-1 has three types of video connections on board:

## What is Composite Video?

Composite video signals are connected between products with a single 75-ohm coax cable with Yellow RCA connectors on each end. Composite video inputs or outputs are present on almost all types of consumer grade video equipment. Composite video signals can also be modulated onto an RF carrier, along with an audio signal, and transmitted over-the-air or on coax cable, by broadcast stations and cable TV systems. RF video signal cables are usually 75-ohm coax terminated with screw-on F-connectors. That's what your cable TV wiring is if you have standard (non digital) cable services.

*Picture Quality:* ***Good.*** *This is the lowest quality cable for a video source, but again, it is also the most common.*

## What is S-Video?

Most midrange and premium video equipment provide the option of using S-video connections. The S-video (or Y/C) cable is terminated at each end with a four-pin DIN connector. Although it may appear to be a single cable, internally it has two 75-ohm coax or twisted pair cables to carry the separate Y (luminance) and C (chrominance) signals.

*Picture Quality:* ***Better.*** *The S-video cable will offer marked improvement over a composite cable.*

## What is Component Video?

Component cables look just like composite cables. The difference is that, where a composite cable carries the entire video signal on a single cable, component cables split the signal in three. The signal itself is referred to as either Y,Cr,Cb, or Y,Pb,Pr. Manufacturers make connecting these cables easy by color coordinating them. The tips of the cables and jacks will be red, green and blue. A good rule of thumb is that, if the connections are RCA type, it is usually a component cable. Most high-end DVD players and HDTV tuners will have component connections.

*Picture Quality:* ***Best.*** *This connection gives a superior image over Composite or S-Video connections.*

## What about HDMI?

HDMI (High-Definition Multimedia Interface) is an uncompressed, **all-digital audio/video interface in a single cable**. HDMI supports standard, enhanced, or high-definition video, plus multi-channel digital audio on a single cable. It transmits all ATSC HDTV standards and supports 8-channel, 192kHz, uncompressed digital audio and all currently-available compressed formats (such as Dolby Digital and DTS).

Only HDMI video inputs and outputs are supported through the external HSM-2 HDMI switcher. This external device connects via DMC-1's RS-232 port and offers full compatibility with 2 HDMI input devices and an output to an HDMI display device. The HDMI inputs track "SAT" and "DVD" commands from the Emotiva remote. The HDMI switcher supports 480i, 480p, 720p, 720i, and 1080i, 1080p resolutions.

**Audio is not switched through the HDMI connections on the external HSM-2 switcher nor are any of the other video inputs "transferred" over to the HDMI output.** If you do not connect any HDMI inputs, there will be no output on HDMI. If you only connect one of the two HDMI inputs, there will only be a video signal on the HDMI output when that source is selected. This may mean that you need to use both HDMI and another video connection to your television to bring in all the video sources switched through the various video inputs present on DMC-1.

### Video Up Conversion

The Emotiva DMR-1 has advanced video DSP circuitry and coding which allows the ultimate flexibility in video signal processing. With these attributes, the DMC-1 can easily allow the following:

*a) Up conversion from Composite Video inputs to S-Video and Component Video outputs.*

*b) Up conversion from S-Video inputs to Component Video outputs.*

*c) Down conversion from S-Video inputs to the MON2 video output jack.*

This flexibility in video conversion allows the DMC-1 to switch ALL of your video sources, regardless of type, making it an ideal central video signal controller. The DMR-1 can also switch HDMI signals.

*Example: - Typically you will connect your video display (Television or Projector) to the Component Video outputs of the DMC-1. With the up conversion capability, any of the video sources using Composite Video or S-Video inputs would automatically be converted to Component Video. Keep in mind that it is ALWAYS preferable to use the best type of input you have available, so if Component Video is not available on the video source component and you can choose between Composite Video or S-Video, choose S-Video.*

One final note about the video switching on the DMC-1 is that there are no video input capabilities for the Tuner, Tape, or Phono sources, so the video output will remain on the last selected video source until another input with video source capabilities is selected.

### Video Output to the Main Screen and OSD

When an audio/video component is selected, the audio will play in your system and the video will be switched to a video input of your TV monitor. You must have the TV connected in order to see the On Screen Display (OSD).

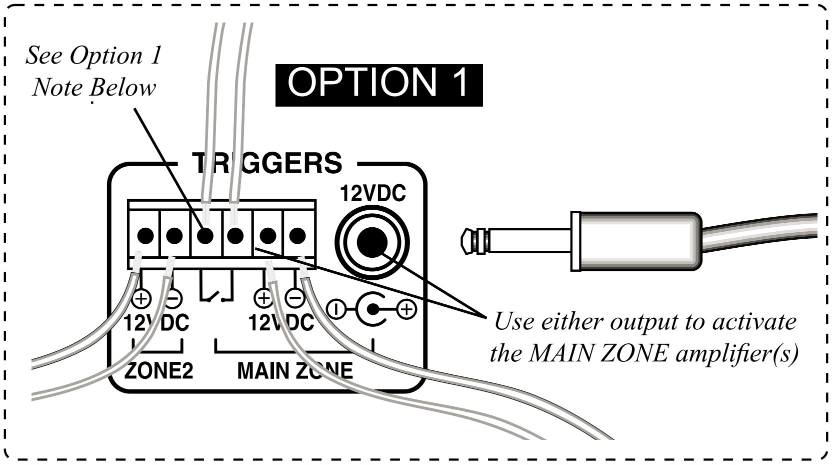
### Zone Specific Turn-On Triggers

The “Main Zone” and “Zone 2” trigger terminals each supply 12 VDC whenever that zone is turned on. This can be used to turn on power amplifiers equipped with a 12 V trigger input.

The two middle terminals marked as relay contacts are connected together only when the Main Zone is on *and* an input is selected for which the trigger output is enabled. The OSD INPUTS Menu can be used to select which inputs have the trigger output enabled or disabled

Use all standard safety precautions and make sure all the equipment is disconnected before making any connections.

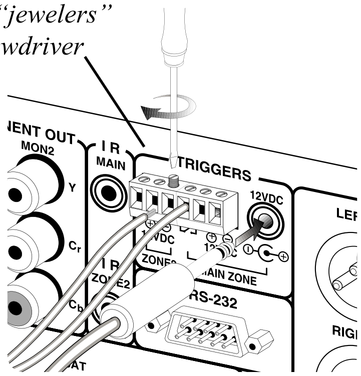
Here are two connection options:

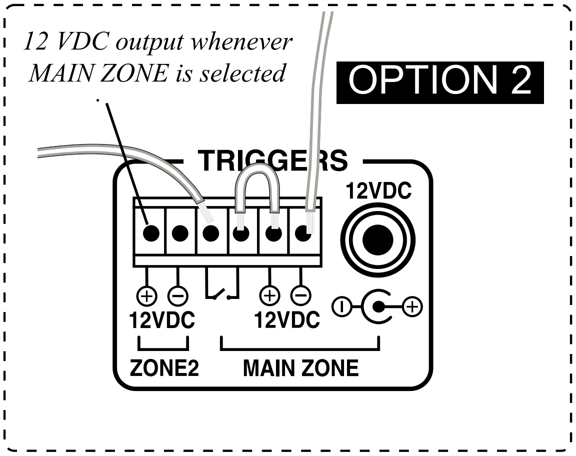

*See Option 1 Note Below*

*Use either output to activate the MAIN ZONE amplifier(s)*

OPTION 1
TRIGGERS
12VDC
12VDC
12VDC
ZONE2
MAIN ZONE

*These terminals can be secured with a small "jewelers" screwdriver*


NENT OUT
MON2
I R
MAIN
TRIGGERS
12VDC
ZONE2
MAIN ZONE
RS-232
Y
Cr
Cb
LEF
RIGI


*12 VDC output whenever MAIN ZONE is selected*

OPTION 2
TRIGGERS
12VDC
12VDC
12VDC
ZONE2
MAIN ZONE

**Option 1**

This shows independent 12 VDC outputs that will turn on any compatible external amplifier with a 12 VDC trigger input. Use the middle relay contacts to enable another independent device that will turn on (as the contacts close) whenever a "trigger enabled" input in the MAIN ZONE has been selected. DO NOT use the center relay contacts for 120 VAC or 240 VAC switching! They are only for low voltage AC/DC loads of 2 A maximum. Typically this will mean low voltage control of structured lighting systems, automated window coverings, or other low voltage devices. **Never switch anything that plugs directly into the wall with these on-board contacts. This action will damage the unit and VOID THE WARRANTY.**

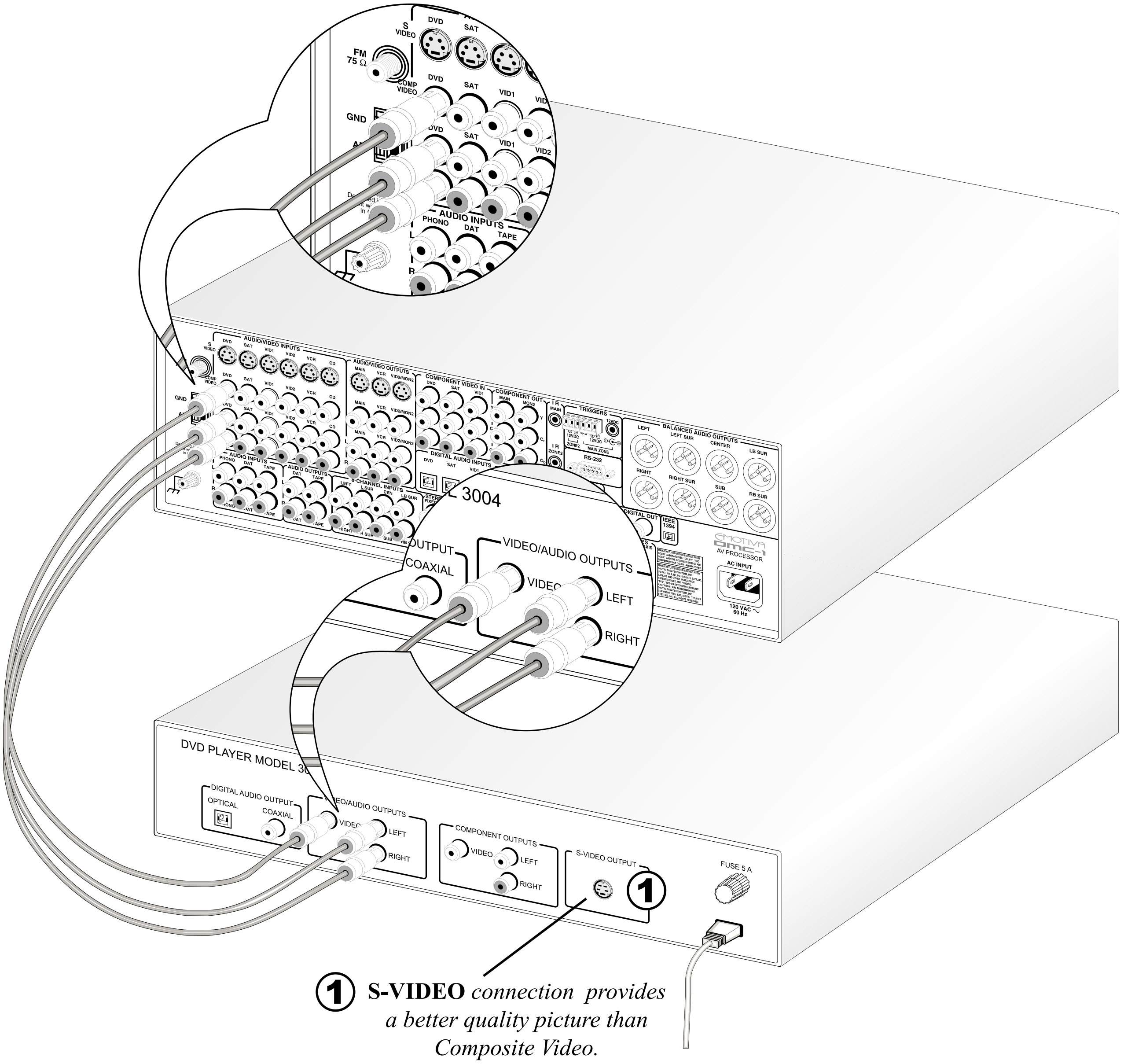
**Option 2**

This simply shows looping the 12 VDC into the relay contact to turn on a device using the available 12 VDC trigger already supplied.

# Connection Diagrams

## Connecting a DVD-Video Player (Analog Audio and Composite Video)

This configuration shows a DVD-Video player connection where the audio output from the DVD player is taken from the analog outputs (Red and White RCA jacks) and video output is taken from the Composite Video output (the Yellow RCA jack).

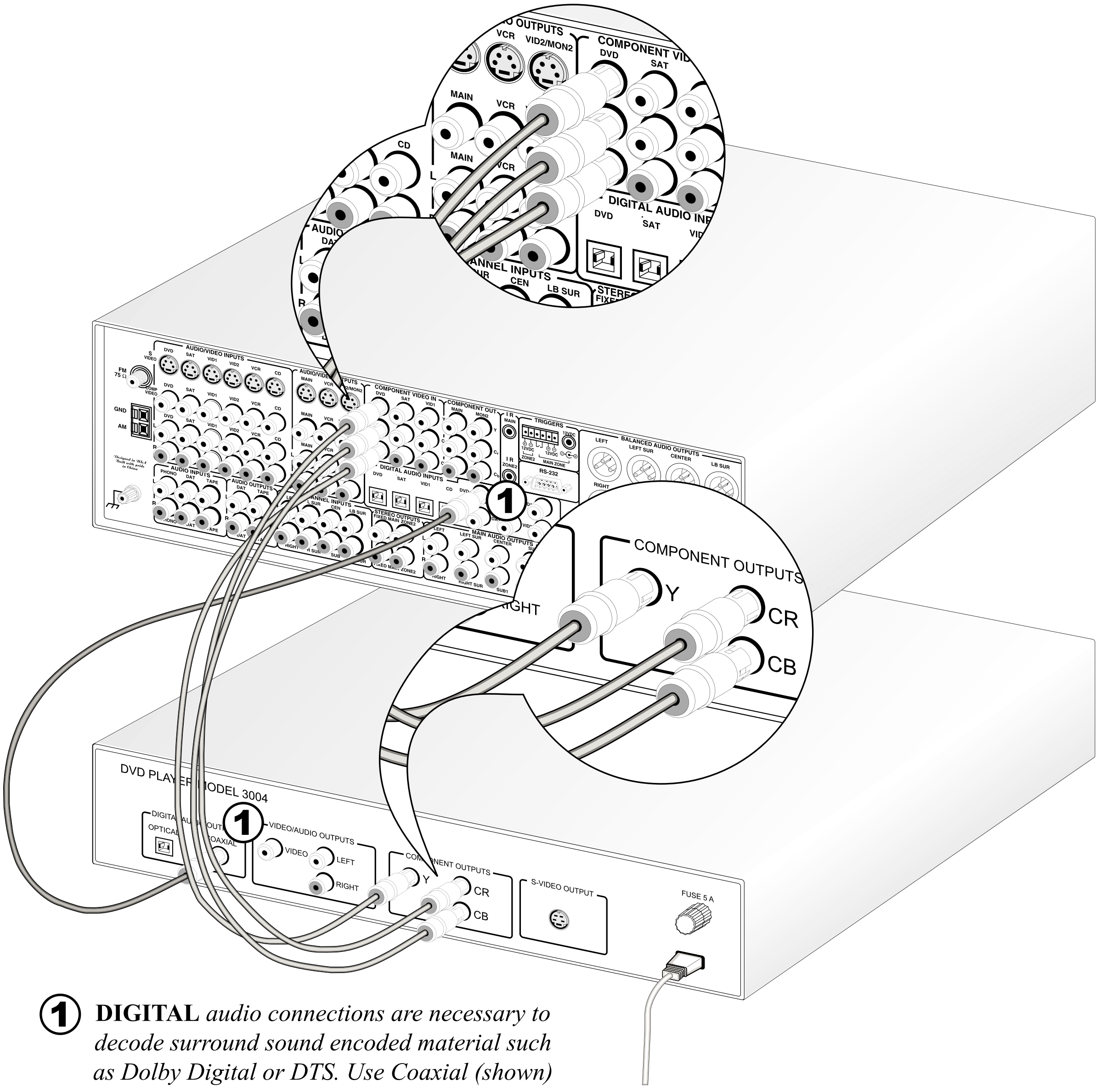

S VIDEO
DVD
SAT
FM 75 Ω
COMP VIDEO
VID1
VID2
GND
AUDIO INPUTS
PHONO
DAT
TAPE
3004
OUTPUT
COAXIAL
VIDEO/AUDIO OUTPUTS
VIDEO
LEFT
RIGHT
DMC-1 AV PROCESSOR
AC INPUT
120 VAC 60 Hz
DVD PLAYER MODEL 3004
DIGITAL AUDIO OUTPUT
OPTICAL
COAXIAL
VIDEO/AUDIO OUTPUTS
VIDEO
LEFT
RIGHT
COMPONENT OUTPUTS
VIDEO
LEFT
RIGHT
S-VIDEO OUTPUT
①
FUSE 5 A

① **S-VIDEO** *connection provides a better quality picture than Composite Video.*

When you select **DVD** on the DMC-1, the audio output from the DVD player will play through the audio system and video will appear on the TV or projector (remember that you must first select the correct input on the TV). While this method will certainly get you up and running, using the S-Video connection would be preferred if you want to experience a better picture quality.

## Connecting a DVD-Video Player (Digital Audio and Component Video)

This configuration shows a DVD-Video player connection where the audio output from the DVD player is taken from the digital output (Coaxial or Optical) and video output is taken from the Component Video outputs (the Red/Blue/Green trio).

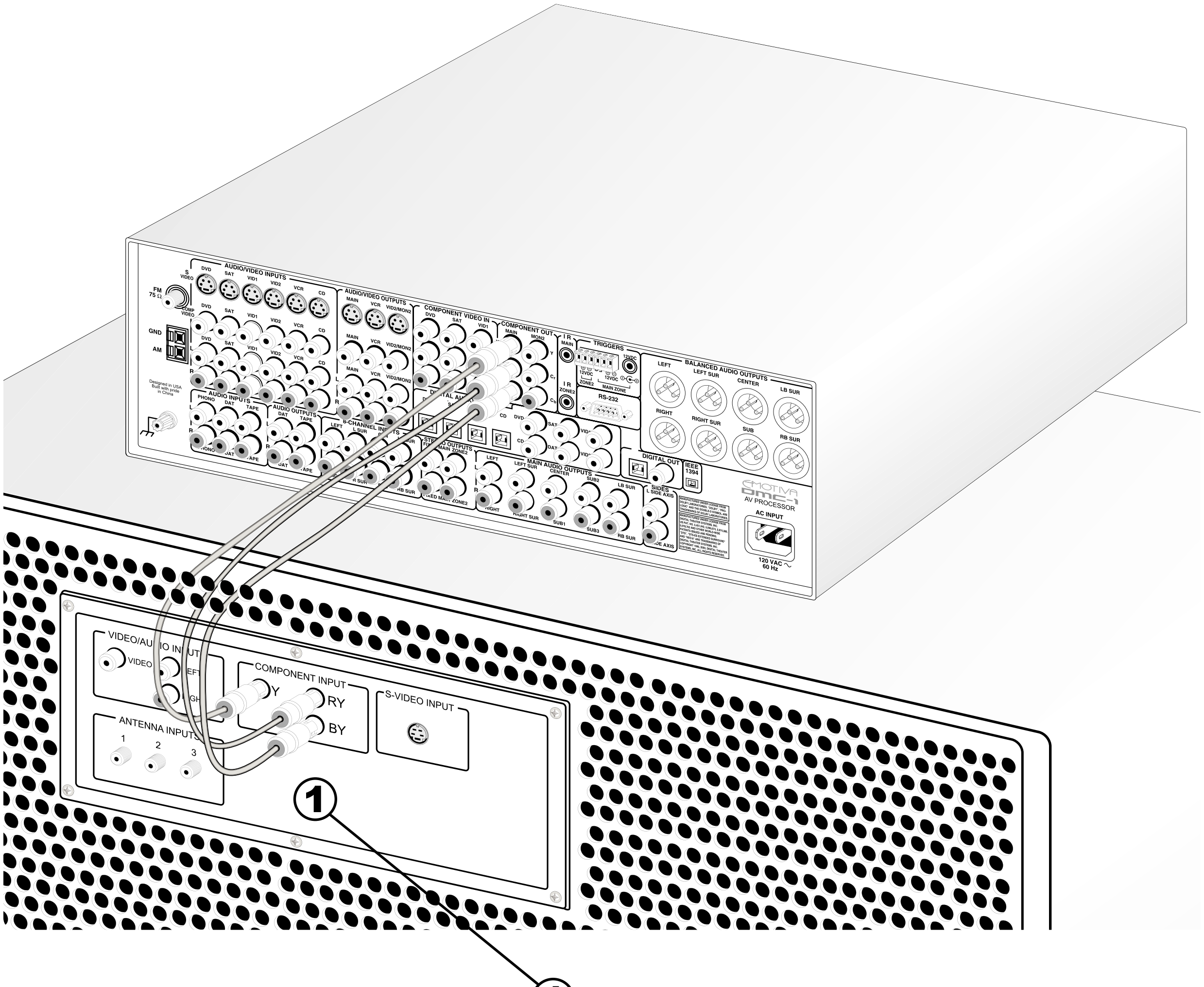

COMPONENT VIDEO IN
DVD
SAT
DIGITAL AUDIO INPUTS
1
COMPONENT OUTPUTS
Y
CR
CB
DVD PLAYER MODEL 3004
DIGITAL AUDIO OUTPUT
OPTICAL
COAXIAL
VIDEO/AUDIO OUTPUTS
VIDEO
LEFT
RIGHT
S-VIDEO OUTPUT
FUSE 5 A

① **DIGITAL** *audio connections are necessary to decode surround sound encoded material such as Dolby Digital or DTS. Use Coaxial (shown) or Optical cables*

When you select **DVD** on the DMC-1, the audio output from the DVD player will play through the audio system and video will appear on the TV or projector (you must first select the correct input on the TV). This method will give the best picture quality and enable the discrete encoded Dolby or DTS audio to be decoded by the DMC-1.

## Connecting to  the TV or Projector using Component Video

This configuration shows the DMC-1 connections to the "main" video display where video output is taken from the Component Video outputs (the Red/Blue/Green trio) labeled "MAIN" on the back panel of the DMC-1.

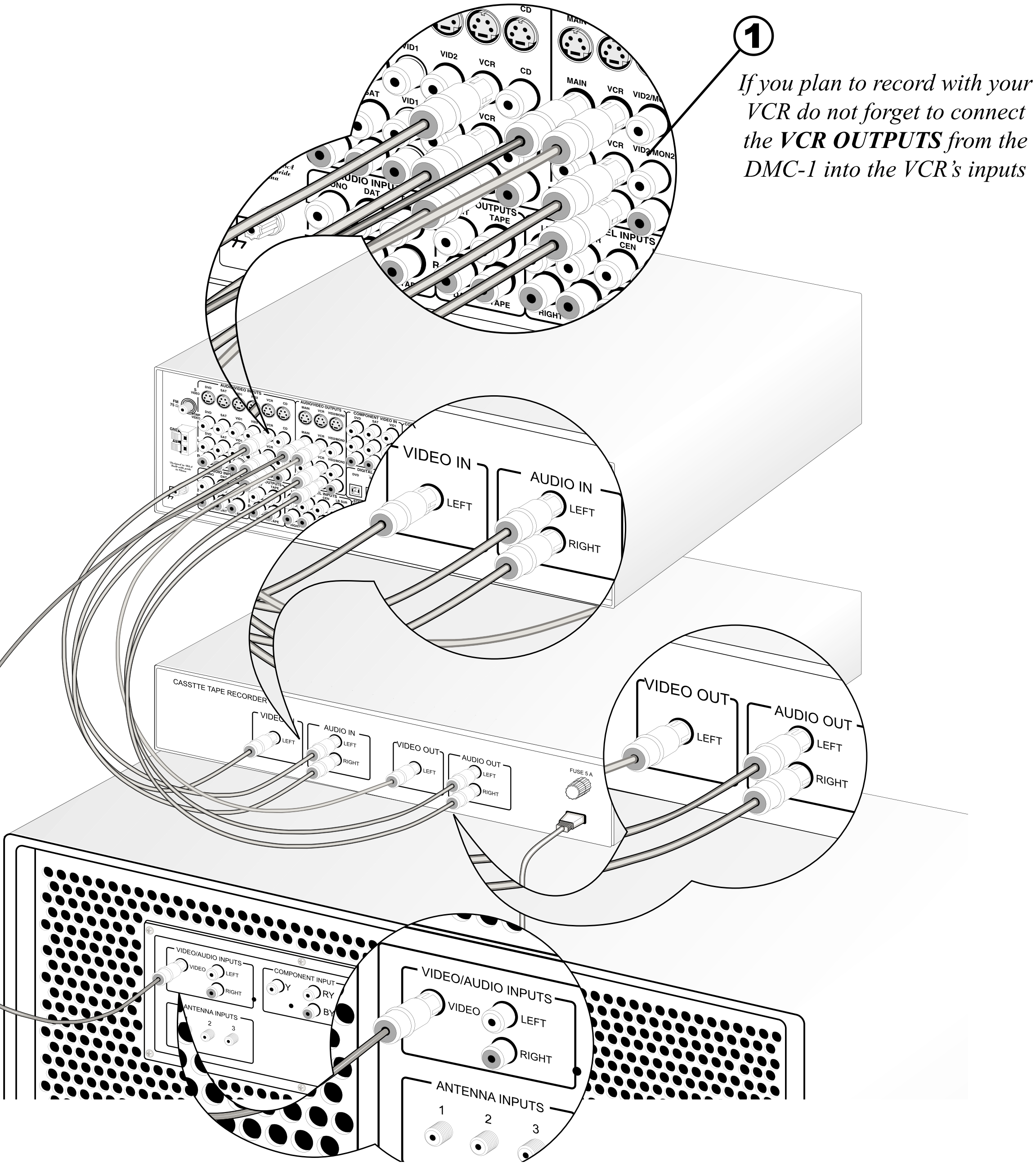

AUDIO/VIDEO INPUTS
AUDIO/VIDEO OUTPUTS
COMPONENT VIDEO IN
COMPONENT OUT
TRIGGERS
BALANCED AUDIO OUTPUTS
MAIN AUDIO OUTPUTS
DIGITAL OUT
AV PROCESSOR
AC INPUT
VIDEO/AUDIO INPUT
VIDEO
LEFT
RIGHT
COMPONENT INPUT
Y
RY
BY
S-VIDEO INPUT
ANTENNA INPUTS
1
2
3
1

① **COMPONENT VIDEO** *Input on the TV or Projector. There may be more than one input on high end video screens*

This configuration will give the best picture quality, especially if the video source component output begins as a native Component Video output. Remember that with the video transcoding feature, the DMC-1 will still allow your Composite or S-Video source inputs to up convert to the Component Video outputs, but you should always connect the highest quality video signal available.

## Connecting a VCR (Analog Audio and Composite Video)

This configuration shows a VCR connection where the audio output from the VCR is taken from the analog outputs (Red and White RCA jacks) and video output is taken from the Composite Video output (the Yellow RCA jack). If you plan to use the VCR for recording, you also must connect the DMC-1's VCR outputs into the VCR inputs.


VID1
VID2
VCR
CD
MAIN
VID2/MON2
AUDIO INPUTS
MONO
DAT
OUTPUTS
TAPE
CEN
RIGHT
VIDEO IN
AUDIO IN
LEFT
RIGHT
CASSTTE TAPE RECORDER
VIDEO OUT
AUDIO OUT
FUSE 5 A
VIDEO/AUDIO INPUTS
VIDEO
COMPONENT INPUT
Y
RY
BY
ANTENNA INPUTS
1
2
3

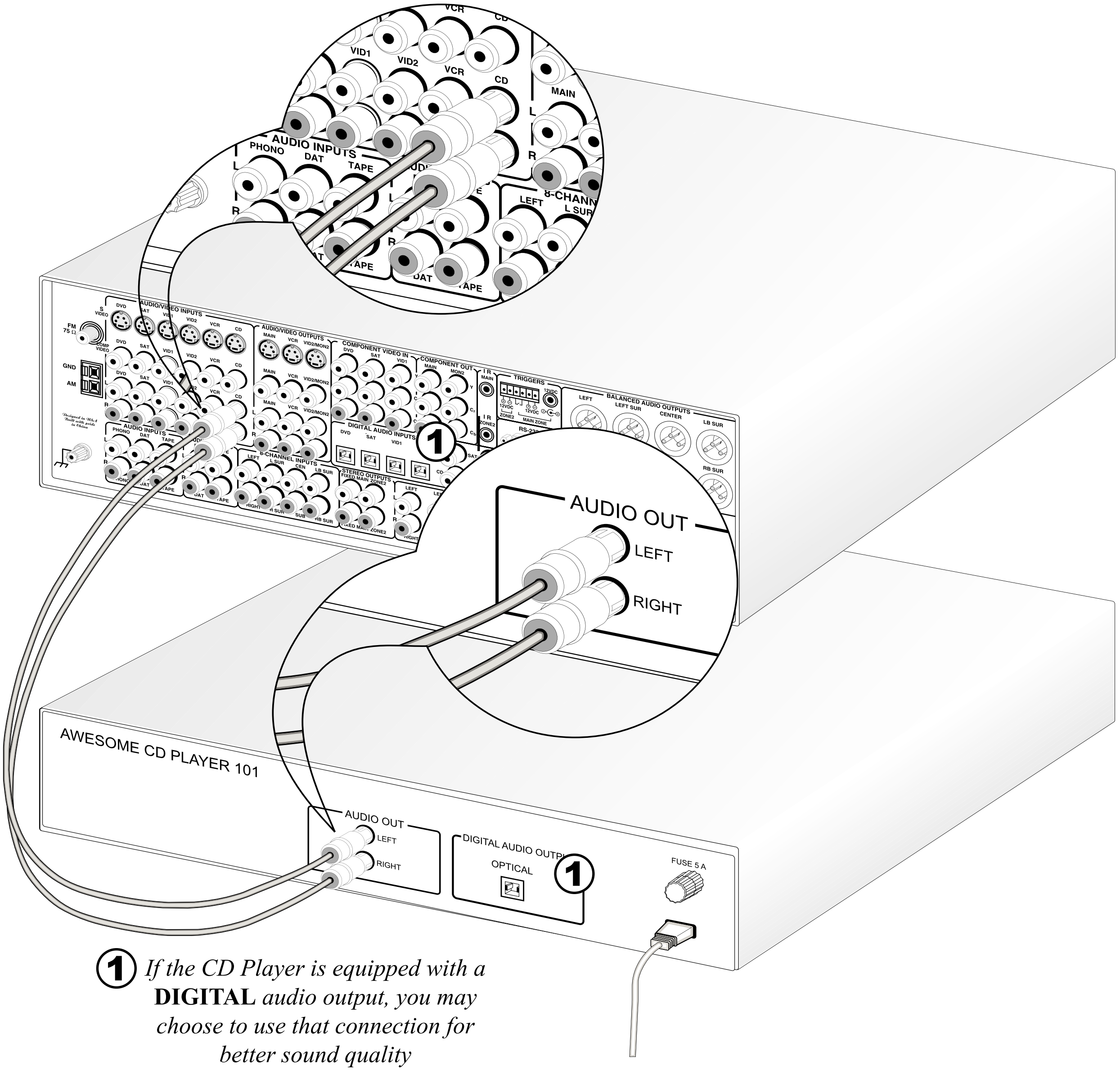
①

*If you plan to record with your VCR do not forget to connect the* ***VCR OUTPUTS*** *from the DMC-1 into the VCR's inputs*

This configuration allows the DMC-1 to route the output of the VCR into the TV or projector. If your VCR has S-Video outputs, you may use that connection type in lieu of the Composite Video RCA jack as shown in the connection diagram.

## Connecting a CD Player (Analog Audio)

This configuration shows a CD Player connection where the audio output from the CD Player is taken from the analog outputs (Red and White RCA jacks).

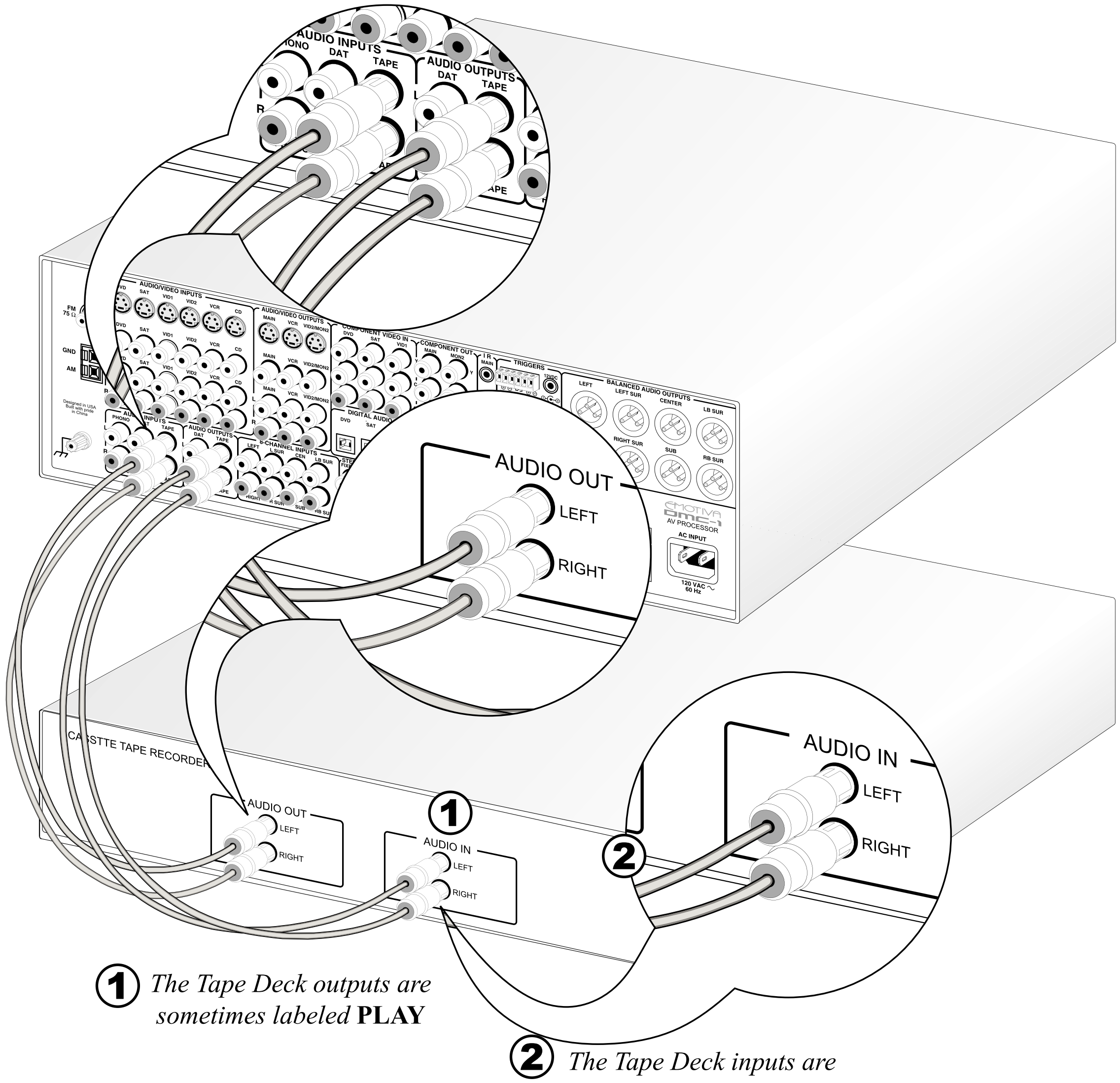

AUDIO INPUTS
PHONO
DAT
TAPE
VID1
VID2
VCR
CD
MAIN
8-CHANN
LEFT
L SUR
AUDIO OUT
LEFT
RIGHT
AWESOME CD PLAYER 101
DIGITAL AUDIO OUTP
OPTICAL
FUSE 5 A
1

① *If the CD Player is equipped with a* **DIGITAL** *audio output, you may choose to use that connection for better sound quality*

When you select **CD** on the DMC-1, the audio output from the CD player will play through the audio system While this method of connection is normal, if the CD player is equipped with an optical digital output you may choose to use that instead. The advantage of doing so allows the professional grade digital to analog converters built into the DMC-1 decode the signal rather than having that done in the CD player.

## Connecting a Cassette Tape or DAT Deck

This configuration shows a Cassette Tape Deck connection where the audio output is taken from the left and right audio outputs (may also be labeled **PLAY**). If you plan to use the Cassette Tape Deck for recording, you also must connect the DMC-1's **TAPE** audio outputs into the Cassette Tape Deck inputs (may also be labeled **RECORD**).


AUDIO INPUTS
PHONO
DAT
TAPE
AUDIO OUTPUTS
DAT
TAPE
AUDIO/VIDEO INPUTS
AUDIO/VIDEO OUTPUTS
COMPONENT VIDEO IN
COMPONENT OUT
TRIGGERS
BALANCED AUDIO OUTPUTS
DIGITAL AUDIO
8-CHANNEL INPUTS
AUDIO OUT
LEFT
RIGHT
EMOTIVA DMC-1
AV PROCESSOR
AC INPUT
120 VAC 60 Hz
CASSTTE TAPE RECORDER
AUDIO OUT
LEFT
RIGHT
1
AUDIO IN
LEFT
RIGHT
2
AUDIO IN
LEFT
RIGHT

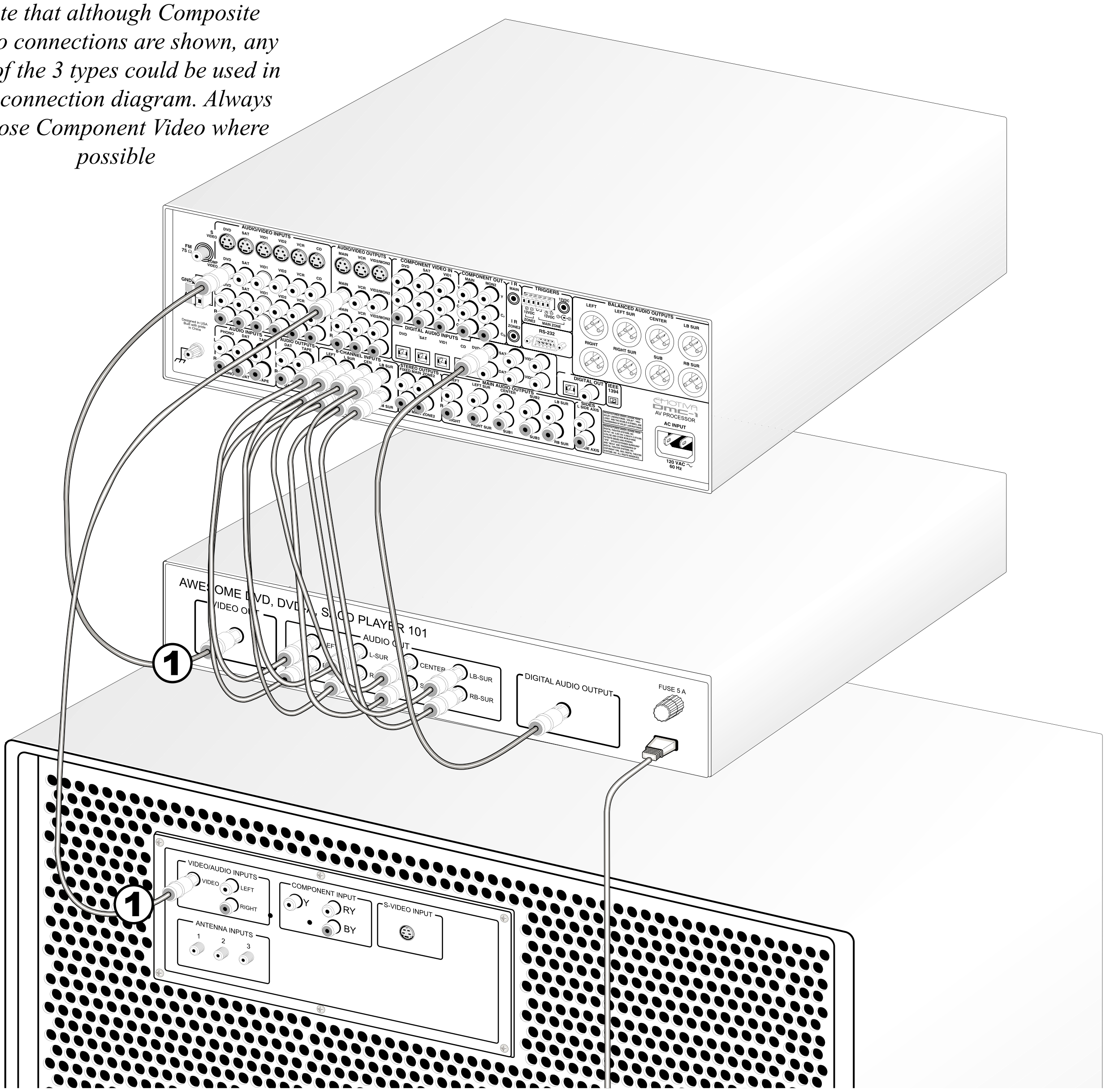
① *The Tape Deck outputs are sometimes labeled* **PLAY**

② *The Tape Deck inputs are sometimes labeled* **RECORD**

Depending on the type of tape deck you connect, the inputs and outputs on the DMC-1 can be connected to TAPE or DAT. If you have both types connected, the DMC-1 will switch automatically on to whichever source is playing. You can't have both playing at the same time. In the diagram shown, recording from any selected source is possible except recording between Cassette Tape and DAT. This is called "dubbing" and is beyond the design intent of the Emotiva DMC-1 preamplifier/processor.

## Connecting the 8-Channel Analog Inputs

This configuration shows the 8-channel inputs that would be used for DVD-A, SACD, and other DSP bypass situations. You may also elect to use this input choice if your DVD-Video player has its own surround processor or if you have an external (dedicated) surround processor.



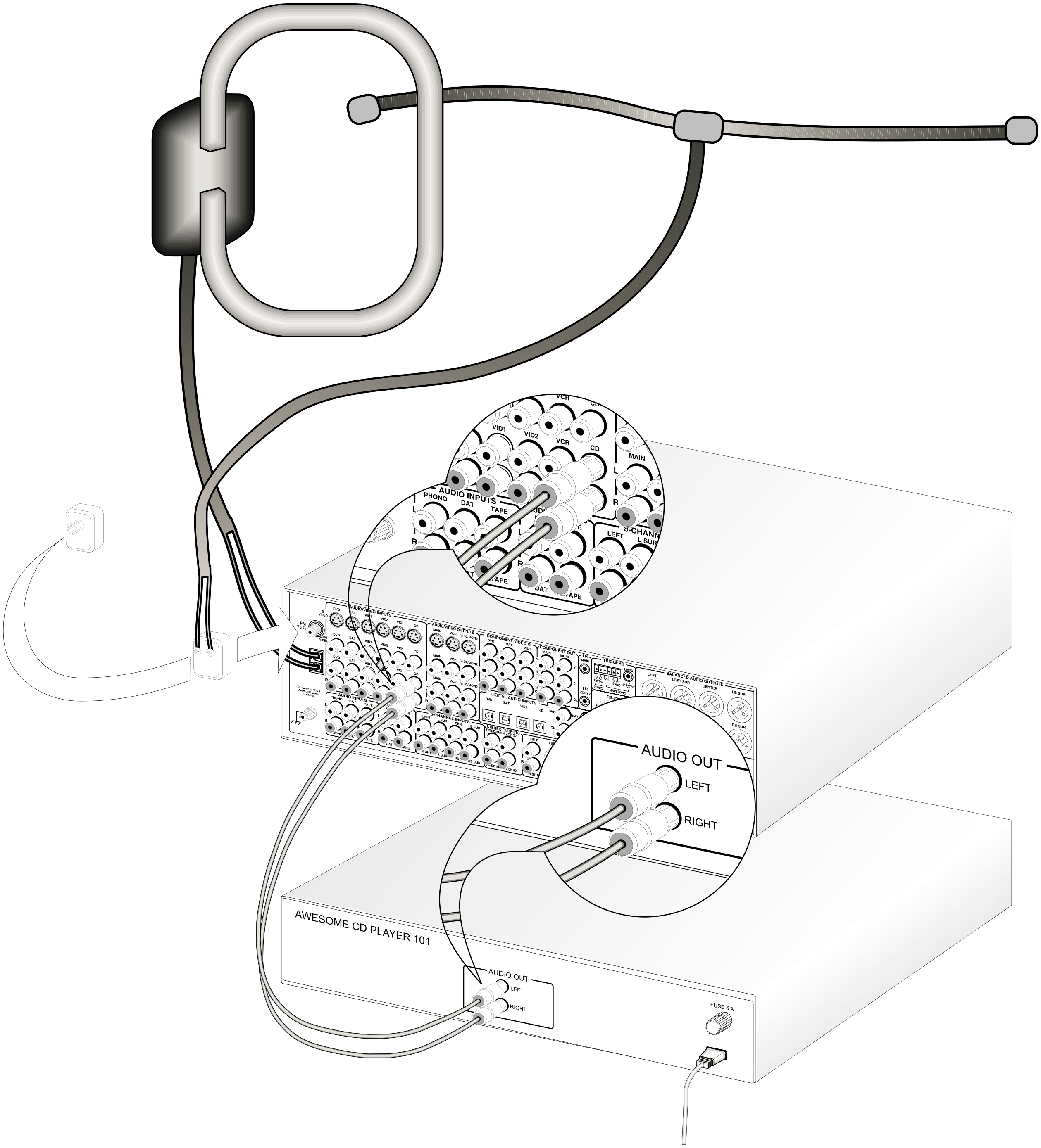
①
*Note that although Composite Video connections are shown, any one of the 3 types could be used in this connection diagram. Always choose Component Video where possible*

AV PROCESSOR
AC INPUT
120 VAC 60 Hz
AWESOME DVD, DVD-A, SACD PLAYER 101
VIDEO OUT
AUDIO OUT
L-SUR
CENTER
LB-SUR
RB-SUR
DIGITAL AUDIO OUTPUT
FUSE 5 A
①
①
VIDEO/AUDIO INPUTS
VIDEO
LEFT
RIGHT
COMPONENT INPUT
Y
RY
BY
S-VIDEO INPUT
ANTENNA INPUTS
1
2
3

The 8 channels of audio completely bypass all digital signal processing functions of the DMC-1 including the tone controls, surround processing, and bass management features. This provides the purest signal quality for high resolution DVD-A or SACD media. This input is only applicable for the MAIN ZONE, not ZONE 2.

## Connecting the AM and FM Antennas

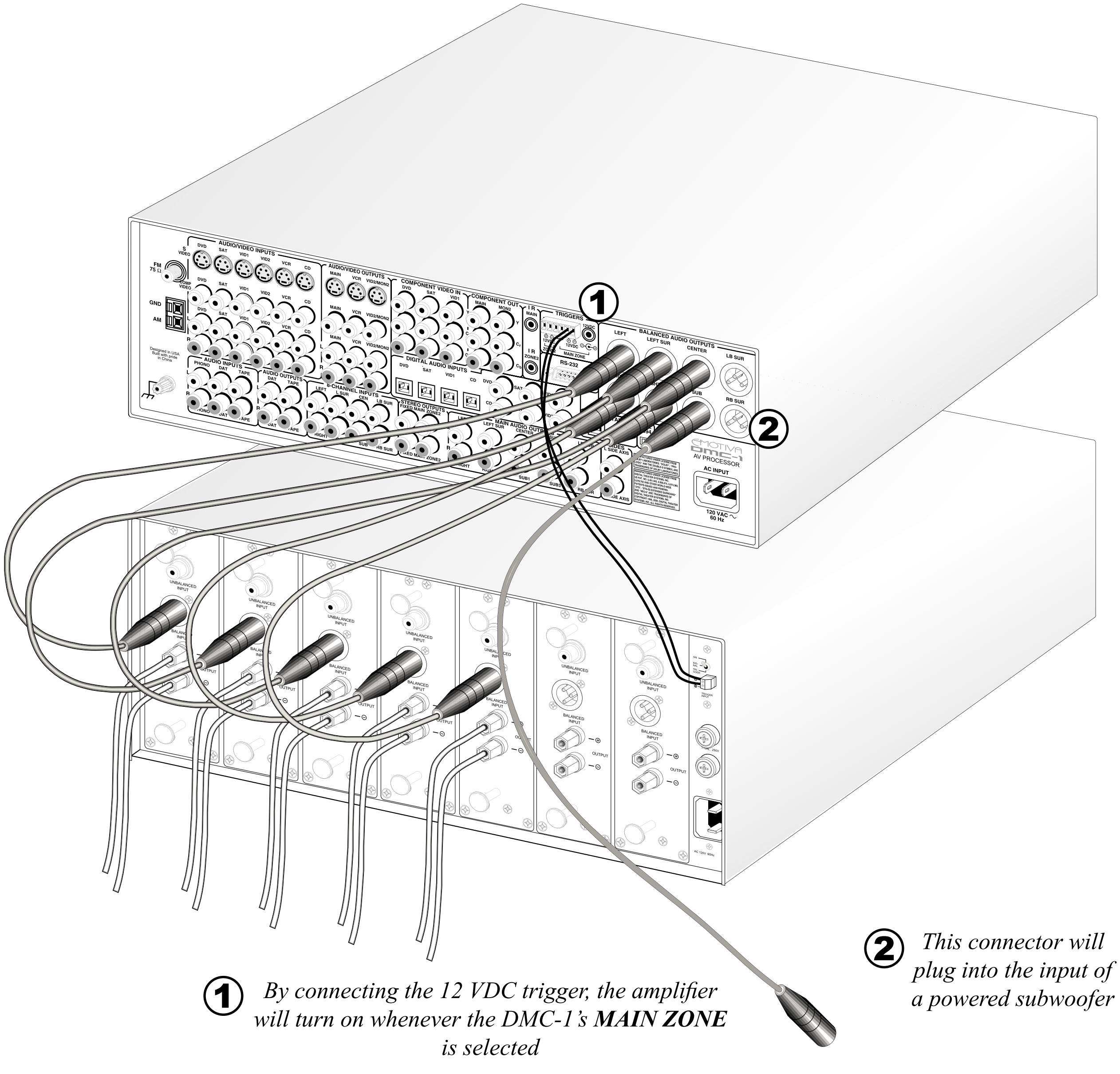
This configuration shows the AM and FM antenna connections. The AM antenna should be a "loop" style antenna with two wires that connect into the AM ANTENNA receptacles. The FM antenna must terminate into an "F style" connector and has a 75 Ohm impedance.


VID1
VID2
VCR
CD
MAIN
AUDIO INPUTS
PHONO
DAT
TAPE
8-CHANN
LEFT
L SUR
AUDIO OUT
LEFT
RIGHT
AWESOME CD PLAYER 101
AUDIO OUT
LEFT
RIGHT
FUSE 5 A

Position the AM and FM antennas where reception is best. The AM loop antenna that has been included with the DMC-1 has been matched to the AM tuner for optimum reception. If you choose to use an outdoor FM antenna, please observe proper safety precautions regarding home wiring as outlined in the beginning of this manual.

## Connecting an Amplifier (MAIN ZONE)

This configuration shows the MAIN ZONE connections to a multi-channel amplifier. You may use single ended RCA audio cables or the preferred balanced XLR audio connections. The advantage of the XLR balanced connections is that they have a much higher rejection to any radiated noise from AC line cord interference. Also note the connection of the 12 VDC trigger to turn the amplifier on.


1
2
AUDIO/VIDEO INPUTS
AUDIO/VIDEO OUTPUTS
COMPONENT VIDEO IN
COMPONENT OUT
TRIGGERS
BALANCED AUDIO OUTPUTS
LEFT
LEFT SUR
CENTER
LB SUR
SUB
RB SUR
AUDIO INPUTS
AUDIO OUTPUTS
DIGITAL AUDIO INPUTS
RS-232
MAIN AUDIO OUTPUTS
DMC-1
AV PROCESSOR
AC INPUT
120 VAC ~ 60 Hz
UNBALANCED INPUT
BALANCED INPUT
OUTPUT

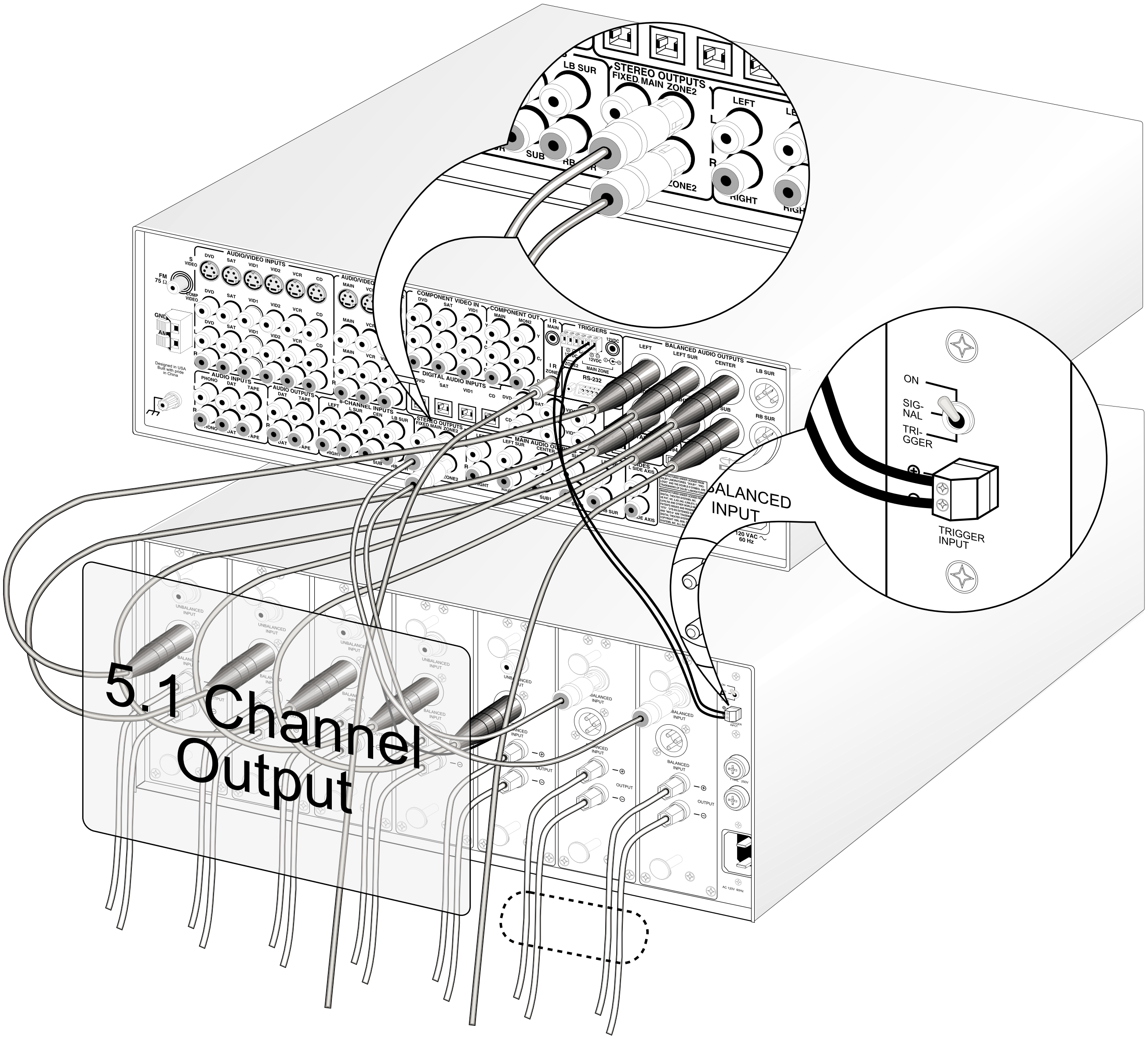
① By connecting the 12 VDC trigger, the amplifier will turn on whenever the DMC-1's **MAIN ZONE** is selected

② This connector will plug into the input of a powered subwoofer

In this configuration the DMC-1 is connected to 5 channels of amplification via balanced XLR connections. The sixth output would connect to the input of a powered subwoofer. If using more than one subwoofer, use the pass through output on one subwoofer to route the input signal to the additional subwoofer(s). If you choose to connect the remaining two connections (**LEFT** and **RIGHT SURROUND BACK**) you will need a 7 channel amplifier like the one shown here - the Emotiva MPS-1 - and you must enable the channels through the **SPEAKER SIZE** menu of the DMC-1 remote control.

## Connecting an Amplifier (ZONE 2)

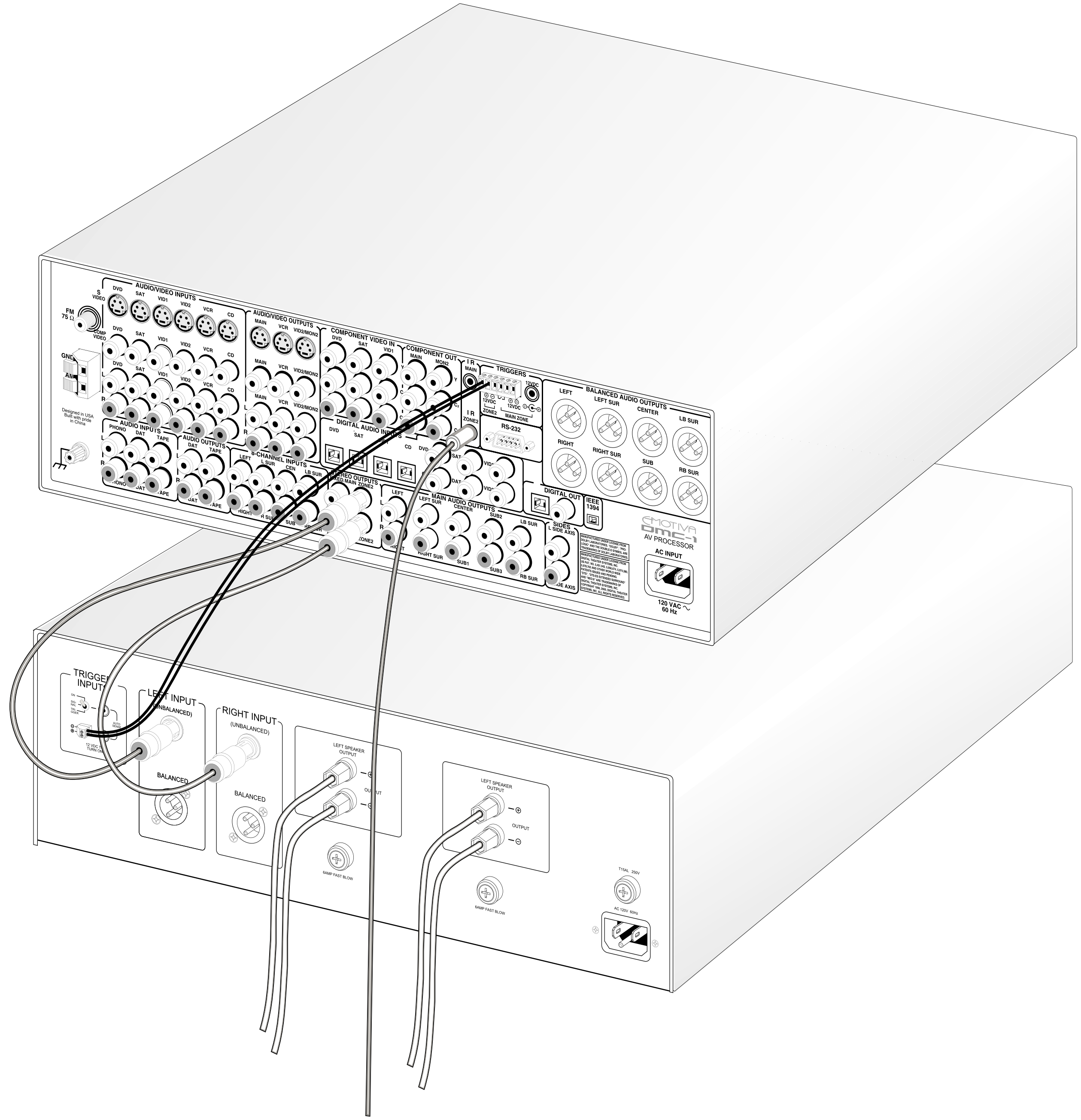
This configuration shows the ZONE 2 connections to a 2-channel amplifier. The output is a left and right RCA connection. Zone 2 does not have the option of balanced XLR connections. Also note the connection of the 12 VDC trigger to turn the amplifier on.


LB SUR
STEREO OUTPUTS
FIXED MAIN ZONE2
SUB
RB
LEFT
RIGHT
L
R
ZONE2
ON
SIG-
NAL
TRI-
GGER
TRIGGER
INPUT
BALANCED
INPUT
5.1 Channel
Output

*Note - for this particular configuration (where the amplifier is 5+2 channels), the channels intended for Zone 2 must be able to have a separate turn-on command or the amplifier will power up Zone 2 whenever the MAIN zone is on. Alternatively, a second (separate) amplifier can be used. See next page.*

## Connecting an Amplifier (ZONE 2)

This configuration shows the ZONE 2 connections to a 2-channel amplifier. The output is a left and right RCA connection. Zone 2 does not have the option of balanced XLR connections. Also note the connection of the 12 VDC trigger to turn the amplifier on.


AUDIO/VIDEO INPUTS
AUDIO/VIDEO OUTPUTS
COMPONENT VIDEO IN
COMPONENT OUT
TRIGGERS
ZONE2
MAIN ZONE
RS-232
DIGITAL AUDIO INPUTS
BALANCED AUDIO OUTPUTS
LEFT
LEFT SUR
CENTER
LB SUR
RIGHT
RIGHT SUR
SUB
RB SUR
AUDIO INPUTS
AUDIO OUTPUTS
8-CHANNEL INPUTS
STEREO OUTPUTS
MAIN AUDIO OUTPUTS
DIGITAL OUT
IEEE 1394
SIDES
AV PROCESSOR
AC INPUT
120 VAC 60 Hz
TRIGGER INPUT
LEFT INPUT
(UNBALANCED)
BALANCED
RIGHT INPUT
(UNBALANCED)
BALANCED
LEFT SPEAKER OUTPUT
OUTPUT
LEFT SPEAKER OUTPUT
OUTPUT

# Overview of the DMC-1 Remote

- *Fully backlit*
- *Pre-programmed for most brands of A/V equipment*
- *Learns commands from your other remote controls*
- *Macro feature lets you program a sequence of control steps*
- *Operates up to ten components*
- *Does not lose programming memory when changing batteries*

## Button Layout

Think of the Emotiva DMC-1 remote control as ten remotes in one. There are ten DEVICE buttons (five on either side of the display) and each allows the remote to operate one piece of equipment.

From the factory, the device buttons are labeled: CD, TAPE, AUX, ZONE2, EMO, DVD, VCR, SAT, TV and CABLE.

Only the **EMO** and **ZONE2** buttons are pre-programmed, and these allow the remote to operate your DMC-1. The remote can be set to operate your other remote controlled equipment.

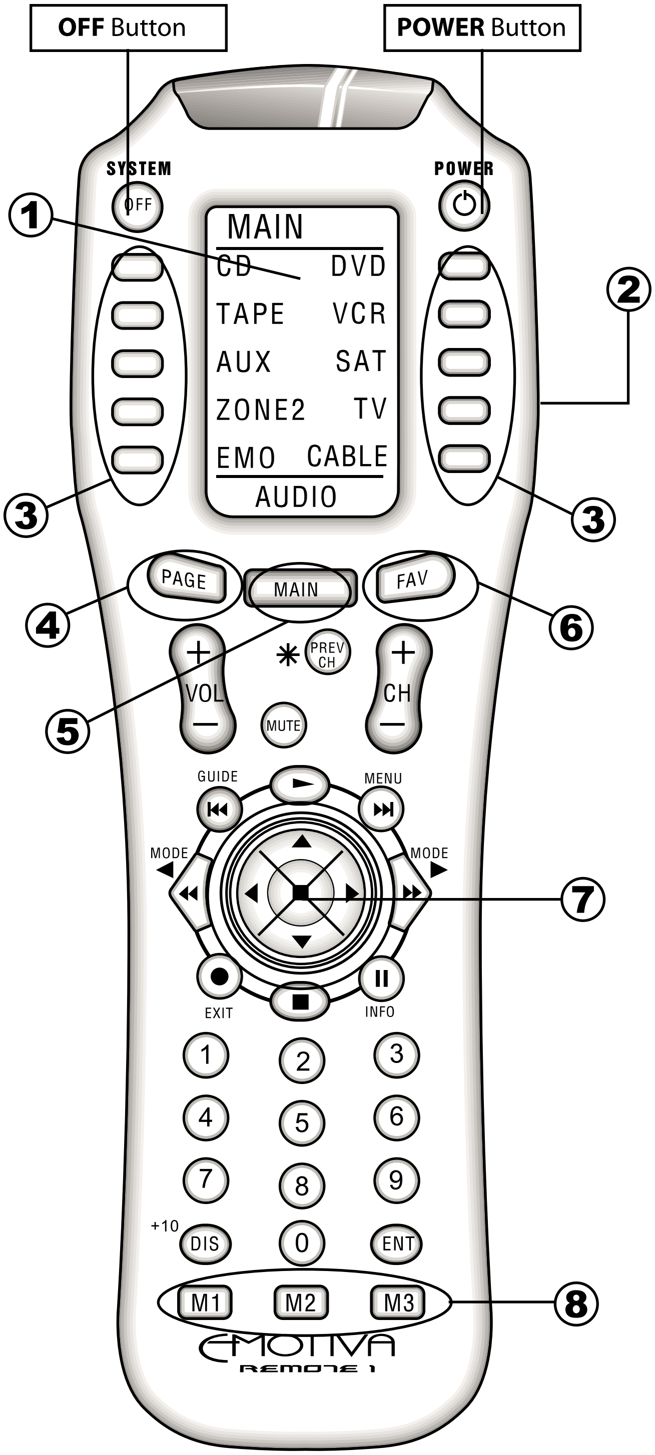
This is done in three ways from the hidden SETUP menu:

*1) Entering a code from the tables at the end of this manual*

*2) Stepping through the codes*

*3) Learning from your other remotes*

See **Remote Setup** on page 44 for more details.


**OFF** Button
**POWER** Button
SYSTEM
OFF
POWER
MAIN
CD
DVD
TAPE
VCR
AUX
SAT
ZONE2
TV
EMO
CABLE
AUDIO
PAGE
MAIN
FAV
PREV CH
VOL
CH
MUTE
GUIDE
MENU
MODE
MODE
EXIT
INFO
1
2
3
4
5
6
7
8
9
+10
DIS
0
ENT
M1
M2
M3
EMOTIVA
REMOTE 1
①
②
③
③
④
⑤
⑥
⑦
⑧

### ① LCD Display

The top line shows the present device, mode or status, and it shows when a remote command is being transmitted. The bottom line shows the page number, status and basic instructions during programming.

The main part of the display shows the labels of the ten DEVICE buttons. You can change any label and customize the remote to fit your system. Note: this is not a touch-sensitive screen, just a way of labeling the device buttons on each side, and showing instructions and status.

### ② Button and Display Light

The button on the right side of the remote briefly turns on the lights for the buttons and display. Pressing it again will turn it off. The duration of time the lights stay on is adjustable or the lights can be disabled.

*Adjusting the LCD Contrast*

The contrast of the display can be changed by holding down the **MAIN** button and pressing the Joystick Pad **UP** or **DOWN**.

### ③ DEVICE Buttons

Once you press a device button, all the device buttons change label and function to become buttons to operate your device. There are two pages per device, and you can move between them using the **PAGE** button.

### ④ PAGE Button

Use this to jump to various display pages. For example, if you press the **EMO** device button, the display changes to some show buttons which control your DMC-1. If you press **PAGE**, the display will move to page 2, showing more functions for the DMC-1

### ⑤ MAIN Button

This button will return the remote display back to the Main menu. Depending on which mode you are in, it may take two or more presses. This will help you get back to the Main menu if you ever get lost in the menus.

### ⑥ FAV Button

This button allows you to step through five display pages of your favorite TV and radio stations. These can be set and relabeled to suit.

### ⑦ JOYSTICK PAD

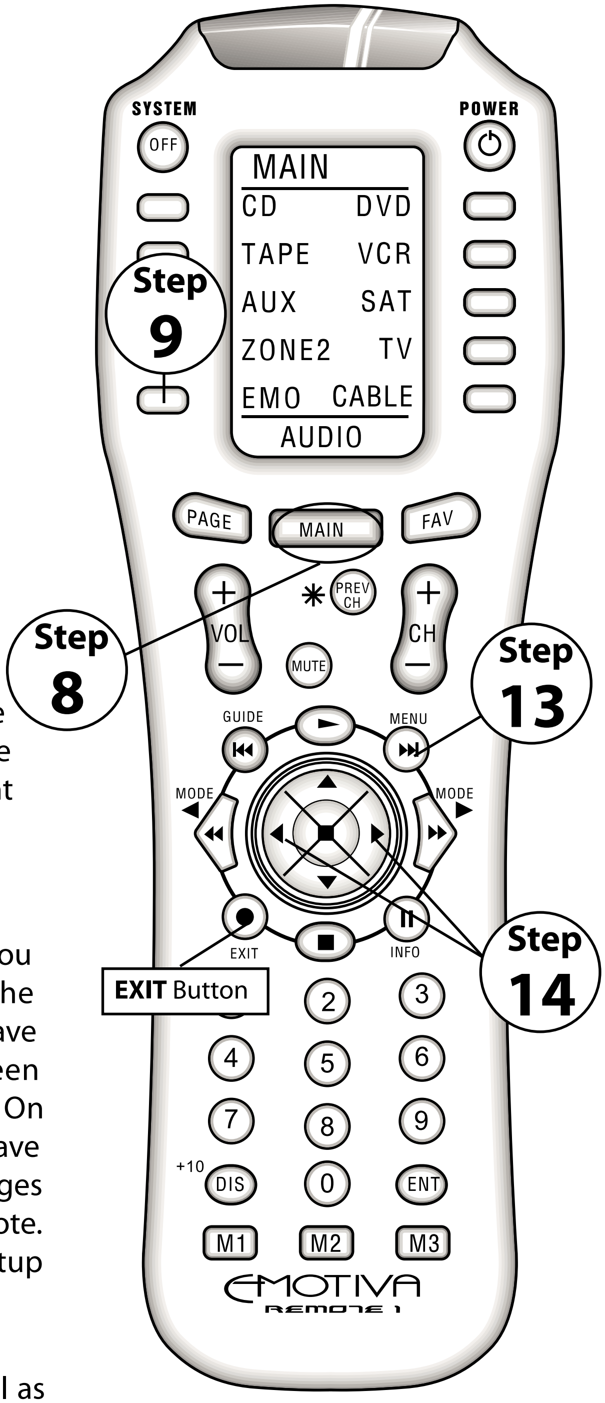
This pad and surrounding buttons are used to operate standard DVD menus, and VCR and Tape Deck controls. In **EMO** mode, if you press **MENU**, the On Screen Display will appear and the joystick can be used to select and adjust the various items.

### ⑧ M1, M2 and M3 Macro Buttons

These **MACRO** buttons can be programmed to send out a sequence of commands with a single press.

# Quick Start Setup Instructions

Most features of the Emotiva DMC-1 can be operated by the remote control's **EMO** section. For the best Home Theater performance, you should calibrate your speakers and customize the DMC-1 settings for your system. Press the MENU button on the remote control to activate the On Screen Display (OSD). This has several menus which will allow you to set up your speakers and calibrate your system correctly. The remote can also be used to activate and control all features of the second zone.


SYSTEM
POWER
OFF
MAIN
CD
DVD
TAPE
VCR
AUX
SAT
ZONE2
TV
EMO
CABLE
AUDIO
Step 9
PAGE
MAIN
FAV
VOL
PREV CH
CH
MUTE
Step 8
Step 13
GUIDE
MENU
MODE
MODE
EXIT
INFO
Step 14
EXIT Button
2
3
4
5
6
7
8
9
+10
DIS
0
ENT
M1
M2
M3
EMOTIVA
REMOTE 1

### Adding Batteries to the Remote Control

The DMC-1 Remote Control uses four AAA batteries. They can be added by simply removing the back cover of the unit and placing them according to the diagram. Once installed, you should expect 6-8 months of normal use before having to replace them again.

Remember that the remote will not lose programming memory when the batteries are removed for changing. This will make subsequent battery replacements a breeze!

### Quick Start Instructions for DMC-1 Setup

The following quick start instructions will help you get started using your Emotiva DMC-1 with the least amount of trouble. For the best results, have the DMC-1 up and running with a video screen connected so you can take advantage of the On Screen Display (OSD) feature. Make sure you have read the safety precautions on the preceding pages before attempting to use your DMC-1 or the remote. You will need a measuring tape during this setup process.

**Step 1** - Add the batteries to the remote control as indicated.

**Step 2** - Connect your source equipment and amplifiers to the DMC-1. If you haven't yet done this, please refer to the connection diagrams in the subsequent sections of this guide.

*Safety Precaution - Make sure that all of your equipment remains unplugged from the AC mains until you have made all the connections.*

**Step 3** - Connect the speakers to your amplifier(s) so you will be able to hear sound.

**Step 4** - If you are using a new DVD player or had previously configured it with 2-channel (RCA type) analog audio connections, you may need to configure the output to digital audio. In your DVD player's AUDIO SETUP MENU, you must set the digital output to **BITSTREAM.** If this is not set correctly, the DMC-1 cannot decode the digital information for discrete surround sound playback.

**Step 5** - The DMC-1 has a bass management system which allows the damaging bass from each full range channel to be redirected to a subwoofer. Larger speakers can typically play the full frequency range, however  you may choose to have smaller speakers (such as satellite types) can have the bass redirected to the subwoofer(s). Make a note of which speakers you would like to play the full frequency range (Large) and those which will have the bass redirected (Small). Also make a note of the approximate distance of each speaker from your listening position.

**Step 6** - Turn on the DMC-1

**Step 7** - Turn on your amplifiers, TV and other source equipment.

**Step 8** - Press the remote **MAIN** button - a few times to make sure you are on the Main Menu in the remote's display.

**Step 9** - Set the remote to operate the DMC-1 by pressing the **EMO** button.

**Step 10** - Turn down the DMC-1 volume and use the remote or front panel input selector to select a video source.

**Step 11** - Play the source, and bring up the volume to a low level. Make sure the video can be seen in the TV monitor.

**Step 12** - Stop or pause the source.

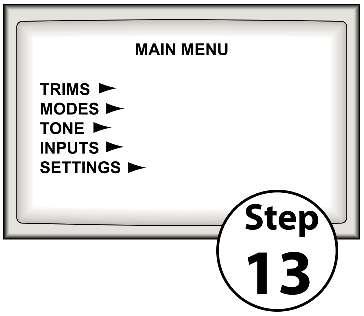
. The DMC-1 now needs to be setup correctly to suit your speakers and system. The **SETTINGS** (OSD) menu is used to enter and make three main adjustments:

· *Speaker Size*

· *Speaker Calibration*

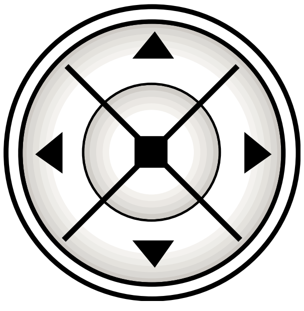
· *Speaker Position*

This setup needs to be done when you use your system for the first time, or if you change anything such as the amplifiers or speakers, or the speaker position. The calibration is also a good way to check that your system is working correctly. These adjustments are made using the OSD as follows:

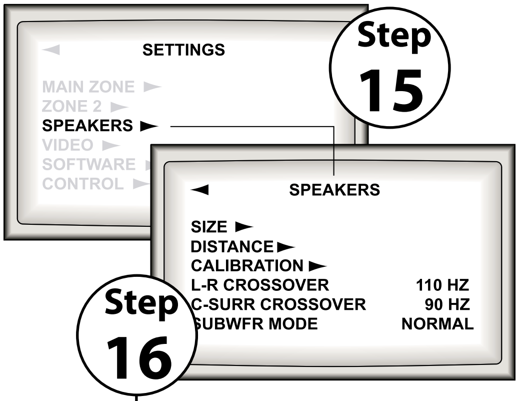


**Step 13** - Press **MENU** on the remote to bring up the MAIN Menu of the OSD on your TV.

**Step 14** -Use the joystick pad left, right, up and down buttons to navigate through the menus in the next steps.



**Joystick**

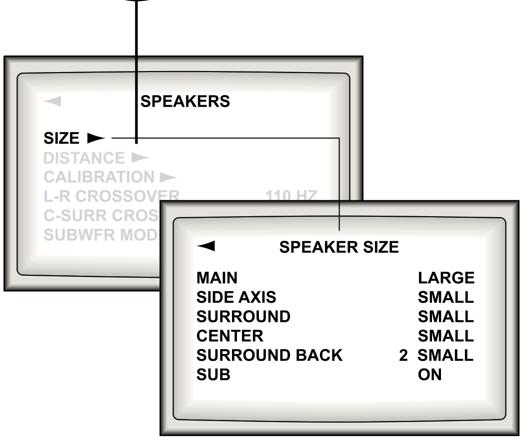

Step 15
SETTINGS
MAIN ZONE ►
ZONE 2 ►
SPEAKERS ►
VIDEO ►
SOFTWARE ►
CONTROL ►
SPEAKERS
SIZE ►
DISTANCE ►
CALIBRATION ►
Step 16

L-R CROSSOVER 110 HZ
C-SURR CROSSOVER 90 HZ
SUBWFR MODE NORMAL

*NOTE: you can quit the OSD at any time by pressing* **EXIT** *on the remote. Any changes you make will be saved. There is no need to navigate back through previous pages, unless you want to make more changes.*

When the OSD is active, the DMC-1 front panel display shows an abbreviated message of where you currently are in the menus.

**Step 15** - In the MAIN Menu, select the SETTINGS Menu, and then the SPEAKERS Menu.

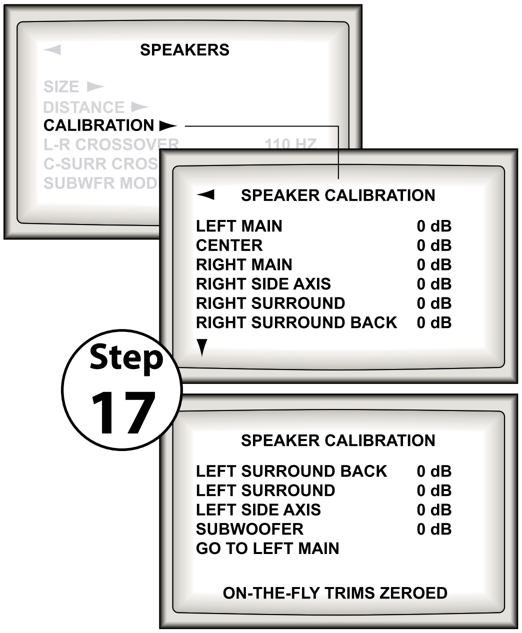

SPEAKERS
SIZE ►
DISTANCE ►
CALIBRATION ►
L-R CROSSOVER 110 HZ
C-SURR CROSSOVER
SUBWFR MODE
SPEAKER SIZE

MAIN LARGE
SIDE AXIS SMALL
SURROUND SMALL
CENTER SMALL
SURROUND BACK 2 SMALL
SUB ON

**Step 16** - In the SPEAKERS Menu, select the SIZE Menu.

*Use the joystick pad to set the size of each speaker to Small or Large, or set to OFF for those speakers which are not present. Return to the SPEAKERS Menu when you are finished.*

**Step 17** - In the SPEAKERS Menu, select the CALIBRATION Menu to adjust the output of each speaker.


SPEAKERS
SIZE ►
DISTANCE ►
CALIBRATION ►
L-R CROSSOVER 110 HZ
C-SURR CROSSOVER
SUBWFR MODE
SPEAKER CALIBRATION
Step 17
SPEAKER CALIBRATION

LEFT MAIN 0 dB
CENTER 0 dB
RIGHT MAIN 0 dB
RIGHT SIDE AXIS 0 dB
RIGHT SURROUND 0 dB
RIGHT SURROUND BACK 0 dB

LEFT SURROUND BACK 0 dB
LEFT SURROUND 0 dB
LEFT SIDE AXIS 0 dB
SUBWOOFER 0 dB
GO TO LEFT MAIN

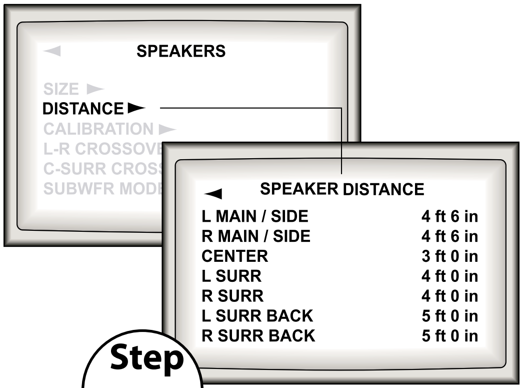
ON-THE-FLY TRIMS ZEROED

*A test noise plays in each selected speaker, and you use the remote to adjust the volume of each speaker until they are all playing at the same level. Return to the SPEAKERS Menu when you are finished. This task can be made easier and more accurately with a low cost sound level meter. Radio Shack and other local suppliers will have this type of product readily available and it is highly recommended.*

**Step 18** - In the SPEAKERS Menu, select the SPEAKER DISTANCE menu.

*Enter the distance from your listening position to EACH speaker. It will be handy to use that measuring tape to get as close as possible. Don't sweat a few inches, but being off by a foot or more will compromise the system's ability to create the a cohesive sound field.*

**Step 19** - If you play a Dolby Digital or DTS encoded source, the DMC-1 will automatically select the correct surround mode. If it is a 2-channel source, you can select a surround mode using the remote's MODE buttons or from the front panel.



L MAIN / SIDE 4 ft 6 in
R MAIN / SIDE 4 ft 6 in
CENTER 3 ft 0 in
L SURR 4 ft 0 in
R SURR 4 ft 0 in
L SURR BACK 5 ft 0 in
R SURR BACK 5 ft 0 in

**Step 18**

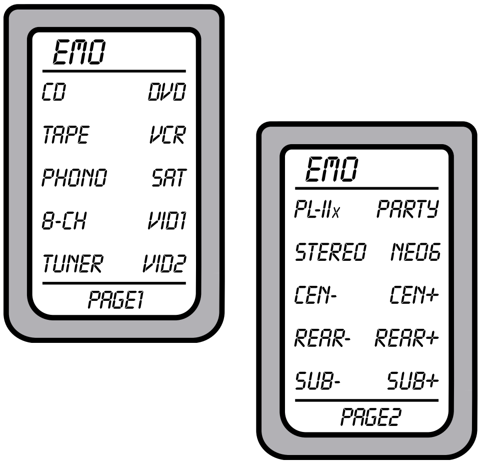
**Step 20** - The DMC-1 has many more options which are described in further detail in the OSD menu section on page 51. These options will help you customize the DMC-1 to suit your tastes. You can do this after you have used the DMC-1 for a while and have a better idea of how you would like to customize your system.

Now you should be ready to enjoy your new Emotiva DMC-1. It will allow you to listen to many great and wonderful audio formats from classic vinyl LP's to the latest big screen blockbuster with up to nine speakers and a one or more subwoofers fully engaged!

For additional information, refer to the pages corresponding to the topic listed.

| FEATURE | PAGE NUMBER |
|---|---|
| ***Remote Control*** | ***Page 43*** |
| ***On-Screen Display*** | ***Page 51*** |
| ***Speaker Size*** | ***Page 56-57*** |
| ***Speaker Position*** | ***Page 58*** |
| ***Speaker Calibration*** | ***Page 59*** |
| ***Bass Management*** | ***Page 63*** |
| ***Surround Modes*** | ***Page 63-66*** |

# Operation of the DMC-1 using the Remote


EMO
CD
DVD
TAPE
VCR
PHONO
SAT
8-CH
VID1
TUNER
VID2
PAGE1
EMO
PL-IIx
PARTY
STEREO
NEO6
CEN-
CEN+
REAR-
REAR+
SUB-
SUB+
PAGE2

*After pressing* **EMO**, *you will enter PAGE 1 and PAGE 2 screens for commanding the DMC-1 by remote. These functions allow source selection and individual level control of specific speakers as labeled*

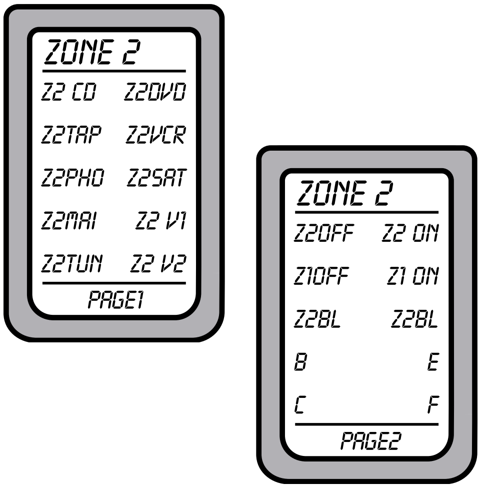
### Turning on the MAIN Zone

1) Press the remote's **MAIN** button to make sure the display is on the main display menu.

2) Press the **EMO** device button to set the remote to operate the DMC-1. The display changes to show the DMC-1 input selections.

3) Press **PAGE** to reach page 2, which shows the PRO LOGIC-II, PARTY, STEREO, and the trims for center, surrounds, and sub. On the right is '+' (increase level) and on the left is '-' (decrease level).

4) The following buttons with fixed labels are also programmed: Power, Volume Up, Volume Down, and Mute. The number pad accesses the tuner presets directly, and **CH+/-** steps through them. **DIS** is the +10 function, and **ENT** is station enter. The **MODE** buttons either side of the Joystick, allow you to select the different surround modes.


ZONE 2
Z2 CD
Z2DVD
Z2TAP
Z2VCR
Z2PHO
Z2SAT
Z2MAI
Z2 V1
Z2TUN
Z2 V2
PAGE1
ZONE 2
Z2OFF
Z2 ON
Z1OFF
Z1 ON
Z2BL
Z2BL
B
E
C
F
PAGE2

*After pressing* **ZONE2**, *you will enter PAGE 1 and PAGE 2 screens for commanding Zone 2 of the DMC-1 by remote. These functions allow source selection as well as control of turning on/off of both zones 1 & 2*

### Turning on ZONE 2

1) Press the remote's **MAIN** button to make sure the display is on the main display menu.

2) Press the **ZONE 2** device button to set the remote to operate the Zone 2 of the DMC-1. The display changes to show the PAGE 1 of the ZONE 2 input selections.

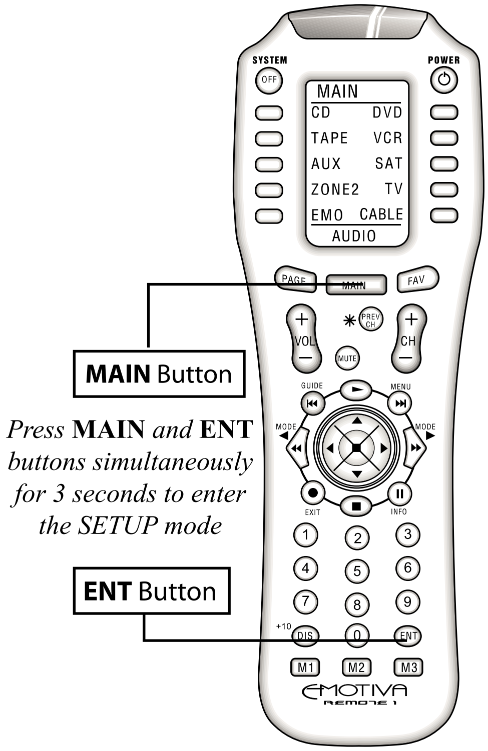
3) The hard buttons operate Zone 2 controls such as Power, Volume, Mute, Tuner Controls, and Presets.

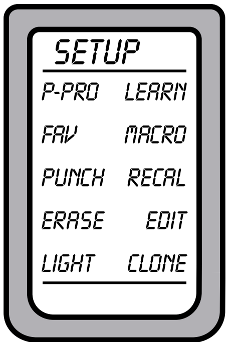
4) Press **PAGE** to reach page 2, which shows Zone 2 on/off, Zone 1 on/off, and balance left/ right

**Note:** Zone 2 must first be enabled using the OSD (see page 55), or these controls will have no effect. Zone 2 is disabled by default as it is shipped from the factory. When enabled, Zone 2 can be turned on even if the Main Zone is off. See page 55 for more Zone 2 details.

# Programming and Configuring YOUR Components

You must enter the **SETUP** mode to program the remote control for the other components in your system, and to customize it for your convenience. There is only one way to enter the **SETUP** mode: Hold down both the **MAIN** and **ENT** buttons for a few seconds until **SETUP** appears in the display.


SYSTEM
POWER
OFF
MAIN
CD DVD
TAPE VCR
AUX SAT
ZONE2 TV
EMO CABLE
AUDIO
PAGE
MAIN
FAV
VOL
PREV CH
CH
MUTE
GUIDE
MENU
MODE
MODE
EXIT
INFO
1 2 3
4 5 6
7 8 9
+10
DIS 0 ENT
M1 M2 M3
EMOTIVA REMOTE 1
**MAIN** Button
*Press* **MAIN** *and* **ENT** *buttons simultaneously for 3 seconds to enter the SETUP mode*
**ENT** Button


SETUP
P-PRO LEARN
FAV MACRO
PUNCH RECAL
ERASE EDIT
LIGHT CLONE

The **SETUP** display shows 10 options.

**P-PRO**
**FAV**
**PUNCH**
**ERASE**
**LIGHT**
**LEARN**
**MACRO**
**RECAL**
**EDIT**
**CLONE**

Each of these setup options is described in the subsequent pages of this section. Please note that there are multiple steps involved in each program sequence, so it is best to read through the section thoroughly BEFORE beginning to setup the DMC-1 remote.

## P-PRO

The remote is pre-programmed to operate many types of equipment. The P-PRO mode allows you to enter a 3-digit code to recall the commands for each of your system components.

1) Find the brand of your TV, DVD, VCR, CD and other components, then look at the tables at the back of this manual. Make a note of the various codes for each piece. *Note that some TV/VCR combined units may use VCR codes, not TV codes.*

2) Sit in a position in front of your equipment, and make sure that all components are turned off.

3) In the **SETUP** mode, press **P-PRO** and the device labels will appear.

4) Select the device button you wish to program, then choose the device table you took the code from. For example, for a TV, press TV twice. If you want AUX to control a VCR, press AUX, then press VCR.

5) You can now enter a code using the remote's keypad, or **UP** or **DOWN**. After the third digit is entered, the remote transmits a power command. If the component turns on, press **SAVE** and then **EXIT**.

6) If you could not find a code which works, hold the **UP** button to step through all the codes in the table for that device. Release **UP** when your equipment turns on. If you go past, press **DOWN**. Press **SAVE** and then **EXIT**.

7) The display will change to show the devices again, still in the **P-PRO** mode. Repeat steps 4 to 7 until all your equipment is working.

8) Press **MAIN** to return to the main menu from any setup mode.

9) Test the remote to see which buttons will operate your equipment. For example, if you were trying to control your TV, check the power, channel up and down, and volume up and down. If some of these buttons are not working correctly, choose another code for that manufacturer, or you can program over those not working by using the **LEARN** mode.

## LEARN

The DMC-1 remote can learn commands from other remote controls. This is useful if the pre-programmed commands do not operate some of your equipment, if certain buttons do not work, or you want to customize key functions. *NOTE: PAGE, MAIN, FAV, M1, M2 and M3 cannot be reprogrammed.*

Find your original remote and make sure it has good batteries. You must also make certain it operates your equipment perfectly. Operate a few commands to ensure that the buttons you want to program are functioning properly from that original remote.

In the following example, the Emotiva remote will learn the PLAY command from a DVD remote.

1) Point the DVD remote into the Red IR top window of the Emotiva remote. Place them on a flat surface, about 1 to 2 inches apart, and avoid bright lighting or sunlight.

2) In the SETUP mode, press **LEARN**.

3) Select the DVD device button and the display will change to show some common DVD labels, remembering that there are two pages from which to choose.

4) Select the **PLAY** button just above the joystick pad. The display will show "READY."

5) Press your DVD remote's **PLAY** button. The display will show "GOOD" if it has been accepted. If it shows "FAIL," press **PLAY** again.

6) Press another button on the Emotiva remote and repeat the procedure until all the DVD buttons you need are learned.

7) Press **MAIN** once to return to the LEARN mode, twice for SETUP and three times for the MAIN menu.

8) Try out the Emotiva remote and see if the learned buttons will successfully operate your equipment. You may find that some commands cannot be learned. This may happen because some commands are or too long , too short or simply not compatible with a learning remote such as the Emotiva remote, but this is very rare.

9) The **EDIT** command can be used to change the labels if some of the standard labels do not correspond to your original remote buttons

## EDIT

This mode allows you to change the labels in the display to suit your system. You can change device labels, or the buttons on page 1 or page 2 of a device, or the FAV labels.

1) In the SETUP menu, press EDIT.

2) To edit a device label, press **PAGE** and then the device button. Go to step 5.

3) To edit a button on a device's page 1 or 2, press the device button and its page 1 will appear. Press **PAGE** to reach page 2 if required. Go to step 5.

4) To edit a FAV button, press **FAV** and select the button you want from the five pages. Use **PAGE** or **FAV** to change pages to find the one you want. Go to step 5. *(Read about FAV programming in the subsequent paragraphs)*

5) Press the button you want to edit and the first character will flash.

6) Use the keypad to enter up to 5 characters. This is like using a telephone keypad to enter letters. For example, if you press 1 a few times, it will step through A, B, C, 1. Press 2 for D, E, F and 2. The number 0 has a selection of special characters from which to choose.

7) Press the **JOYSTICK RIGHT** to move on to the next character, or press **JOYSTICK DOWN** to delete a character.

8) When finished, press the button next to the label you just edited. You can edit other buttons, or press **MAIN** a few times to return to the main menu.

## FAV

This mode allows you to enter your favorite TV and radio stations. Note that the following procedure assumes you have already programmed your remote to operate your TV, radio tuner and other equipment. The keypad must already be able to select channels on your TV or SAT, and any DMC-1 tuner presets.

Before using **FAV** mode, use the **EDIT** mode to change the labels in the **FAV** display to show your station call signs or reminders. You can also delete the labels from unused buttons, or move all your most favorite **FAV** labels to **PAGE 1**.

1) In the SETUP mode, select **FAV**.

2) Select the device, such as SAT, TV or EMO, to learn station commands from.

3) The FAV display will appear, and you can step through five pages using **PAGE** or **FAV**.

4) Press a favorite channel button and the first character will blink. Use the keypad to enter the channel number. For channels below 10, you should enter a 0 (zero) first. If you want, you can enter a power button before entering the channel. Also, if your equipment needs it, you may have to enter the **ENT** button after the channel is entered. If you want to add a short delay, press **PAUSE** (II). You can add 0.2 seconds each time you press **PAUSE**.

5) When you have finished with one channel, press its button, and the label will reappear. Move on to the next favorite channel and program it in the same way. Repeat this for all the channels and devices. Press **MAIN** to return to the top menu.

6) Now, if you press the molded **FAV** button, the favorite channels appear in the display, and the ones you programmed will take you to your favorite channel or radio station. If you programmed in a power command, the TV or tuner will turn on first.

7) The commands are sent in sequence, for example for channel 13, first the 1 and then the 3 are sent. Wait a few seconds before switching between favorites, or your TV may receive for example, the 1 of one button and the 2 of the next.

## PUNCH

This mode allows you to set up the volume, channel up/down and transport buttons so they will work for your main devices, no matter which device the remote is set for. For example, the volume buttons can operate the TV, even if the remote is set to VCR. The channel buttons can operate the VCR, even if the remote is set to TV.

1) In SETUP, select **PUNCH** and the display changes to show VOL, CH, and PLAY. The PLAY selection will make the eight transport buttons around the joystick "punch" through.

2) Select one of these buttons, for example VOL.

3) Press a device button for the device you want the Volume commands to appear in (punch TO).

4) Press a device button for the device you want to learn from (punch FROM). These settings are saved.

5) Repeat steps 2 to 4 until you have punched to all devices you want.

6) Use MAIN to return to SETUP.

*NOTE: To erase Punch commands from a device (return buttons to their previous programming): Repeat steps 1 and 2, then press the device button twice. Repeat for other devices, then press* **MAIN** *to return to* **SETUP**.

## ERASE

Use this mode to erase commands stored in the remote. This does not affect the labels, just the stored IR commands. The pre-programmed commands for the DMC-1 can be lost. Please follow this section CAREFULLY!

1) In the SETUP mode, select **ERASE** and the display will show LEARN, FAV, MACRO and EXIT.

2) If you select **LEARN**, press **ALL** to erase all learned buttons, or **KEY** to erase one device at a time. If you use **KEY**, press **MAIN** and **EXIT** when you have erased all the devices you want. **NEVER select ALL! This will erase the EMO operating codes and the remote will have to be sent to the factory for re-programming.**

3) If you select **FAV**, press **ALL** to erase all favorites, or **KEY** to erase single favorites. Note that the labels are not erased.

4) If you select **MACRO**, press **ALL** to erase all macros, or **KEY** to erase macros, one device at a time.

5) Press **EXIT** to return to the SETUP menu, and press **MAIN** to return to the main device menu.

## LIGHT

This mode allows you to either disable the light, or change the number of seconds it stays on. (The light is inactive while in the SETUP mode).

1) In the SETUP menu, select **LIGHT** and the display will show **ON**, time in seconds, **SAVE** and **EXIT**.

2) If you press **ON**, it changes to **OFF** and disables the light. This is useful if you want to save battery life, or if you have children who like to use the remote as a flashlight.

3) Use the keypad to enter the amount of time (in seconds) in which you wish the light to remain on after releasing the light button. If you enter 00, it only stays on while the light button is held down.

4) Select **SAVE**, or press **EXIT** to make no change. Either of these will return you to the SETUP menu.

## MACRO

The macro mode allows you to set up certain buttons to transmit up to 20 commands in sequence. For example, a single button press could turn on all of your home theater equipment, and set the DMC-1 to DVD, set the TV to channel 3, and set the DVD to play, make the tea and put the cat out.

The buttons which can be programmed as macros are: M1, M2 and M3 at the bottom of the remote, and Power and System at the top. The ten device buttons can also be programmed as macros, although these will only be activated if the device button is held down for a few seconds.

Note that the macro buttons are independent of which device the remote is set for. So there is only one M1 macro, only one power macro etc.

1) In the SETUP mode, press **MACRO**.

2) Press one of the buttons you wish to program as a macro, such as **M3**, Power, or a device button.

3) Press up to 20 buttons you would like the macro program to store. Do this in the exact order you want them to be transmitted. Use the **PAGE**, **FAV** and the direct buttons to find buttons to use in the macro.

4) To add a delay between steps, you can add 0.2 seconds each time you press **PAUSE** (II). This does not take up a step.

5) Press the **CHANNEL UP** button to save your macro.

6) Repeat this procedure to program more macros, and press MAIN to return to the main menu.

7) Try out the macros to see if they work as expected. It may take some time to transmit all the commands in sequence, so keep the remote pointing at your equipment and do not move it during this time.

*Note that the remote's* ***ZONE 2, PAGE 2*** *has discrete on and off codes for the Main Zone and Zone 2. You can use these within Macros instead of the main power button commands (which toggle on/off).*

## RECAL (Recall)

This mode lets you quickly see the three digit codes you have assigned to each device. This is useful if you want to check the tables and find other codes which may work better.

1) In the SETUP mode, select **RECAL**. The device labels and their codes will flash alternately, before returning to the SETUP menu. Make a note of the codes.

2) Press **MAIN** to return to the main device menu.

## CLONE

This feature allows you to easily copy all of the commands and labels from one Emotiva remote (of the same type) to another.

1) Set both remotes on a flat surface, with their IR windows pointing towards each other, about 1 or 2 inches apart.

2) In the SETUP menu for both remotes, press **CLONE** and the display will change to show **SEND**, **RCV** (receive) and **EXIT**.

3) Press **SEND** on the remote you want to copy from. Press **DEVIC** to only clone a single device, then press the device button. Press **ALL** to clone all programming.

4) Press **RCV** on the remote you want to copy to.

5) When you are ready, press **START** on both remotes. It may take up to 1 minute to complete the clone sequence so do not move the remotes during this time. The remote will flash "GOOD" if it has successfully learned all the commands. If it flashes "FAIL," then repeat this procedure.

6) Press **MAIN** to return to the main menu.

# The On-Screen Display (OSD) Functions

## Video Connections

The On Screen Display (OSD) function is present at the MAIN Composite Video, S-Video, or Component Video outputs. It is also present at the output labeled VID2/MON2, but only if it is set to MON2 in the programming steps using the OSD. Make sure that your TV monitor's video input is connected correctly to one of these outputs.

## OSD Activation

The OSD is activated using the remote's **MENU** button (with the remote set to operate the **EMO** function). The joystick pad and surrounding buttons allow you to navigate through the OSD menus to control and customize many features of the DMC-1.

Press **EXIT** to quit the OSD at any time. Any changes you make will be saved.
*Note that the DMC-1 front panel display shows abbreviated text when the OSD is activated.*

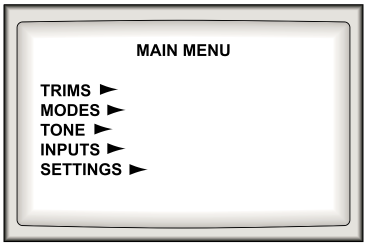
### Quick Access to Information

Pressing **INFO** at any time will bring up a short description of the source you are listening to.
For example if you are listening to a DVD, the TV display might show:

***DVD DIGITAL 48K***
***DTS 5.1 / 5.1***

What this means is that DVD is the selected input and the signal type is DIGITAL. The sample rate of the signal is 48kHz and the decoding mode is registered as DTS is the mode, 5.1 is the input format, 5.1 is the output (i.e. five speakers and a subwoofer).

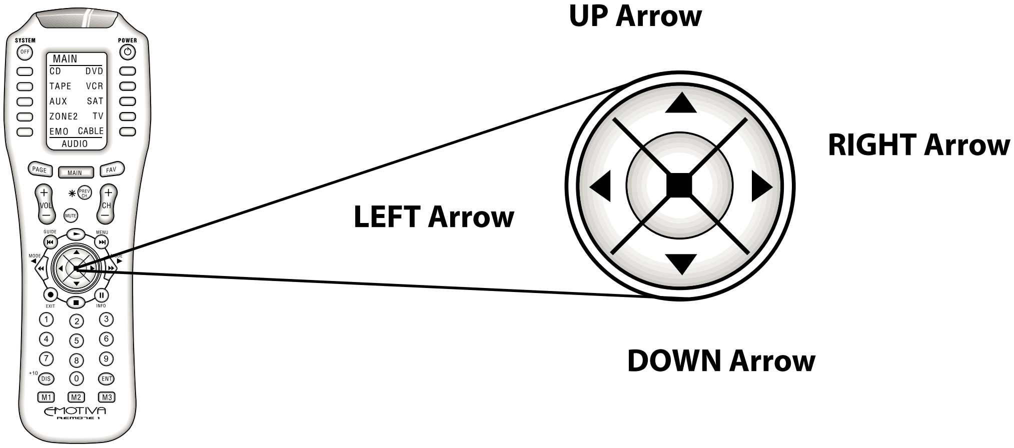
# OSD Menus



The first menu of the On Screen Display (OSD) has the following items listed. TRIMS, MODES, TONE, INPUTS, SETTINGS, and an EXIT option to quit programming. Press MENU on the Emotiva remote to bring up the first OSD menu screen.

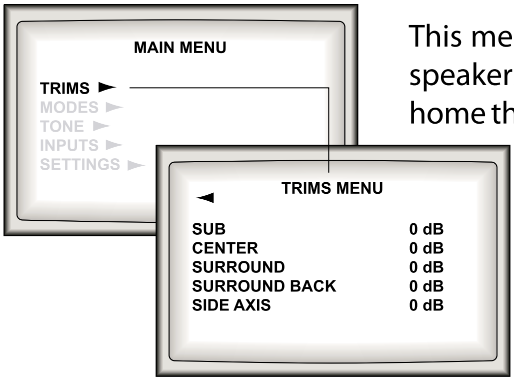
### How to Navigate the OSD Menus

Select any one of the options using the joystick pad UP and DOWN to navigate through them menu choices. Once you make a choice, a FORWARD arrow after text on the screen, shows there is more information on another page. A BACK arrow shows that you can return to the previous page. When applicable, a DOWN arrow, such as at the bottom of the Inputs Menu, shows there is a second page of similar choices. In these circumstances, the UP arrow shows the way back to the first page.



*NOTE: You can quit the OSD at any time by pressing EXIT on the remote. Any changes you make will be saved. There is no need to navigate back through previous pages, unless you want to make more changes.*

# TRIM Menu

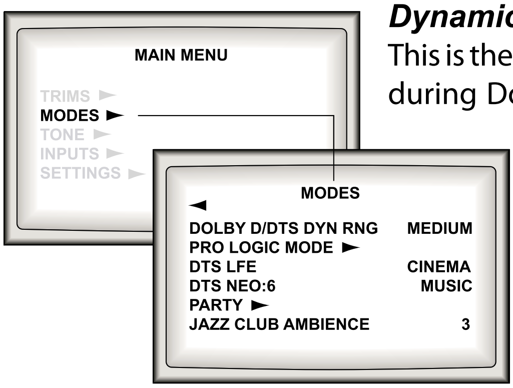


SUB 0 dB
CENTER 0 dB
SURROUND 0 dB
SURROUND BACK 0 dB
SIDE AXIS 0 dB

This menu allows you to adjust the individual volume level of your speakers "on-the-fly." Although careful calibration is key to a good home theater, the Trims allow fine adjustment of the current program playing. The Trims add or subtract from the reference levels set during calibration using the Speaker Calibration menu. Recalibrating will reset these on-the-fly trims to zero.

*Note: The Trim adjustments do not exceed +/-10 dB*

# MODES Menu



MAIN MENU

TRIMS ►
MODES ►
TONE ►
INPUTS ►
SETTINGS ►

MODES
◄
DOLBY D/DTS DYN RNG MEDIUM
PRO LOGIC MODE ►
DTS LFE CINEMA
DTS NEO:6 MUSIC
PARTY ►
JAZZ CLUB AMBIENCE 3

### *Dynamic Range*

This is the range in level between the loudest sound and quietest sound during Dolby Digital and DTS playback only. The options are **QUIET** (narrow range), **MEDIUM** (average range) and **LARGE** (wide range). Select Quiet for late night listening if you do not want to disturb anyone. Select Loud for full dynamic range.

### *Pro Logic IIx Sub Menu*

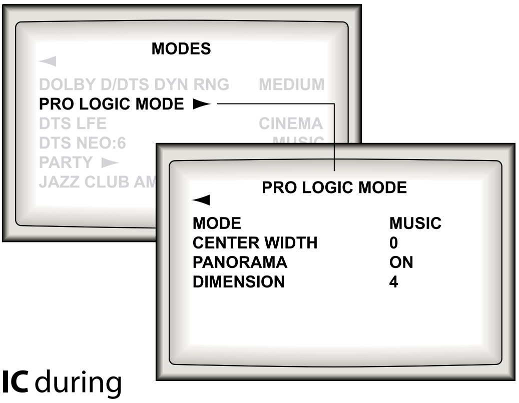
Select this for Dolby Surround playback, or to enhance any 2-channel stereo program. A second menu will show the available options.

*Pro Logic II and Pro Logic IIx Modes:*

**PLII Movie, PLIIx Movie, PLII Music, PLIIx Music, PLII Matrix,** or **PLII Pro Logic**. These are described in more detail on pages 63-64.

PLII and PLIIx Music modes have three options which allow you to create a more realistic surround effect from 2 channel sources:

- ***Center Width*** *-This spreads the center channel between the front left and right channels.*
- ***Panorama*** *- This wraps the front left and right channels around to the surround channels.*
- ***Dimension*** *- This adjusts the balance between the front and surround speakers.*



MODES
◄
DOLBY D/DTS DYN RNG MEDIUM
PRO LOGIC MODE ►
DTS LFE CINEMA
DTS NEO:6
PARTY ►
JAZZ CLUB AM

PRO LOGIC MODE
◄
MODE MUSIC
CENTER WIDTH 0
PANORAMA ON
DIMENSION 4

### *DTS LFE*

Set your subwoofer (LFE) channel for either **CINEMA** or **MUSIC** during DTS playback. In the Cinema setting, there is no change to the DTS subwoofer level from that mastered on the DTS disc. For the Music setting, there is a 10 dB reduction, necessary to accurately match the levels on DTS music discs.

### *DTS Neo:6*

This allows you to select either **CINEMA** or **MUSIC** for DTS Neo:6 playback. These two options are described in more detail on page 64.

### *Party*

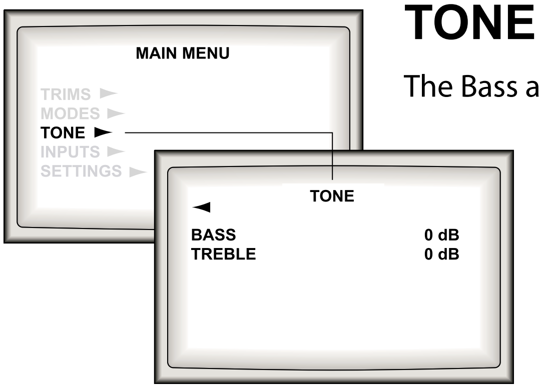
This mode allows you to play a stereo source with multiple speakers. A second menu allows you to select which speakers are present.

### *Jazz Club Ambience*

This adjusts the ambience and effects of the Jazz Club mode, simulating various venue sizes and strength of the rear reflections.

# TONE Menu

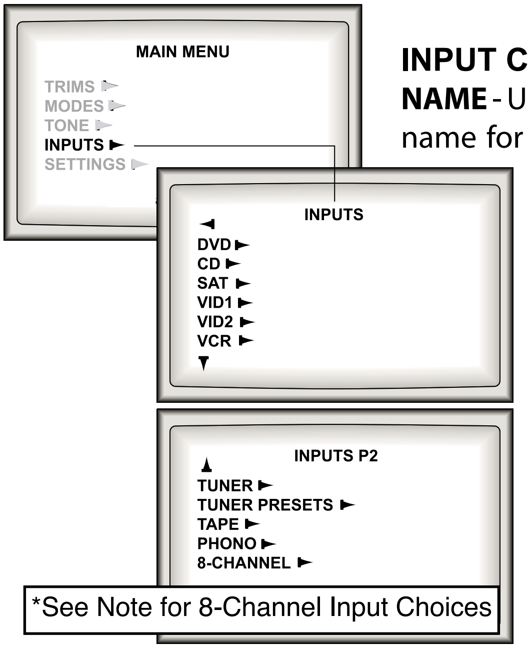
The Bass and Treble can be boosted or cut by up to 10 dB.


MAIN MENU
TRIMS
MODES
TONE
INPUTS
SETTINGS
TONE

| | |
|---|---|
| BASS | 0 dB |
| TREBLE | 0 dB |

# INPUTS Menu

These menus let you select which input you would like to configure. Pressing the joystick right on each input brings up a second menu which allows you to configure what happens when each input is selected.


MAIN MENU
TRIMS
MODES
TONE
INPUTS
SETTINGS
INPUTS
DVD
CD
SAT
VID1
VID2
VCR
INPUTS P2
TUNER
TUNER PRESETS
TAPE
PHONO
8-CHANNEL

*See Note for 8-Channel Input Choices

## INPUT CONFIGURATION MENUS *(The example shows the DVD menu)*

**NAME** - Use the joystick up/down, and left/right to change the display name for any input, up to 9 characters. Move fully to the left after entering the name.

**GAIN TRIM** - Use this to adjust all of your sources to play at similar levels. To prevent overloading, the levels can only be adjusted downwards. You should try and trim all the inputs to be the same average level as your quietest source.

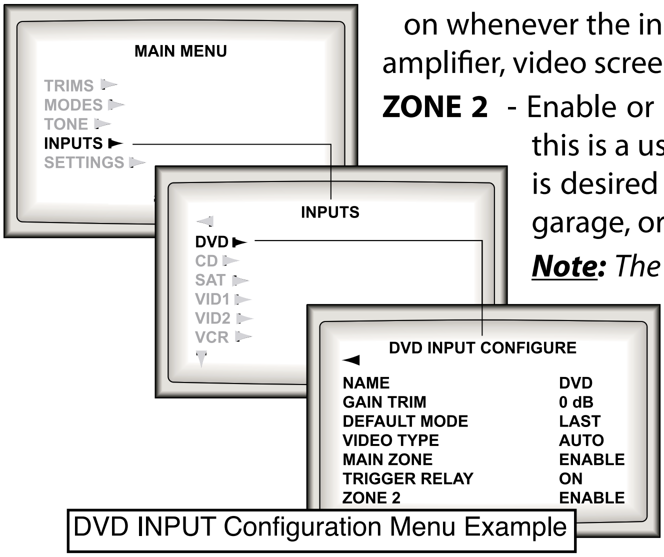
**DEFAULT MODE** - Set the input to a favorite surround mode or stereo.

**MAIN ZONE** - Enable/disable the selected input in the Main Zone. You can set up your system so any unused inputs are not selectable. From the factory, the inputs are enabled. If you choose to disable an input, then it will not play in the Main Zone.

**TRIGGER RELAY** - The Trigger Relay can be set to turn on whenever the input is selected. This could be used to turn on an amplifier, video screen, lighting controls, etc.

**ZONE 2** - Enable or disable the input for use in Zone 2. Sometimes this is a useful idea to implement when a simple selection is desired in the second zone (such as a patio, play room, garage, or bedroom).

***Note:*** *The 8-Channel input menu is different from the other menus as it allows you to select a* *specific video input* *whenever the 8-Channel audio input is selected. Also,* ***this input only works in the MAIN ZONE****, not in ZONE 2.*


MAIN MENU
TRIMS
MODES
TONE
INPUTS
SETTINGS
INPUTS
DVD
CD
SAT
VID1
VID2
VCR
DVD INPUT CONFIGURE

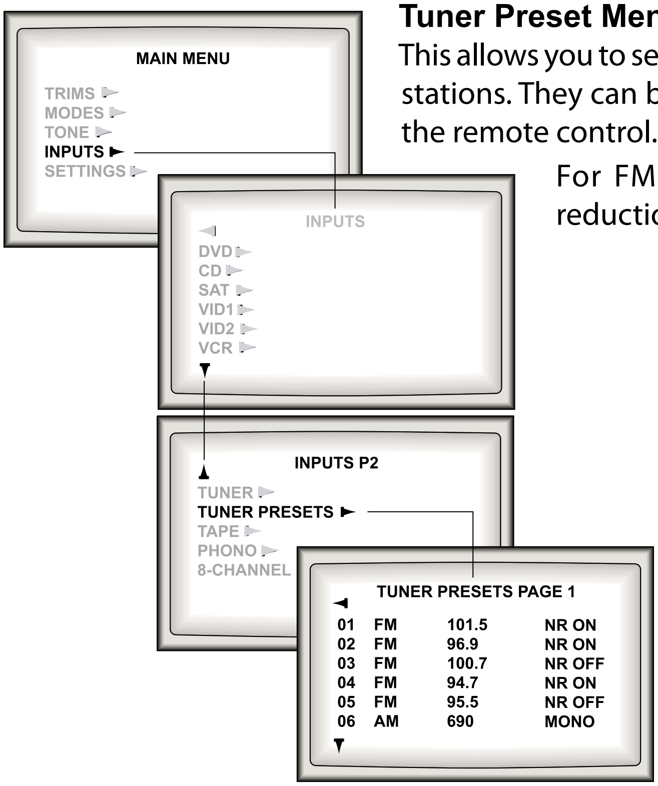
| | |
|---|---|
| NAME | DVD |
| GAIN TRIM | 0 dB |
| DEFAULT MODE | LAST |
| VIDEO TYPE | AUTO |
| MAIN ZONE | ENABLE |
| TRIGGER RELAY | ON |
| ZONE 2 | ENABLE |

DVD INPUT Configuration Menu Example

### Tuner Preset Menu

This allows you to set the AM/FM band and frequency of up to 40 radio stations. They can be recalled quickly and set as favorite stations on the remote control. See pages 67-68.

For FM stations, try to select the Stereo-NR (noise reduction) for the best reception.


MAIN MENU
TRIMS ►
MODES ►
TONE ►
INPUTS ►
SETTINGS ►
INPUTS
◄
DVD ►
CD ►
SAT ►
VID1 ►
VID2 ►
VCR ►
▼
▲
INPUTS P2
TUNER ►
TUNER PRESETS ►
TAPE ►
PHONO ►
8-CHANNEL
TUNER PRESETS PAGE 1
◄
▼

| | | | |
|---|---|---|---|
| 01 | FM | 101.5 | NR ON |
| 02 | FM | 96.9 | NR ON |
| 03 | FM | 100.7 | NR OFF |
| 04 | FM | 94.7 | NR ON |
| 05 | FM | 95.5 | NR OFF |
| 06 | AM | 690 | MONO |

### Saving AM/FM Presets

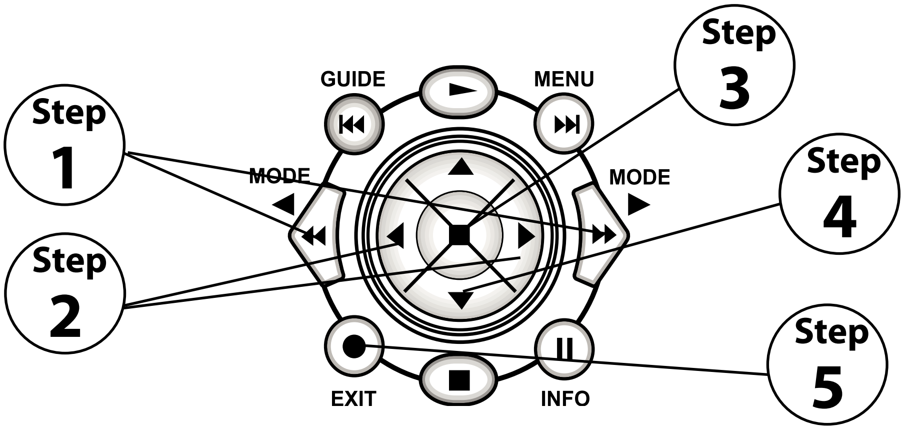
*Step 1) Once you are on a preset in the OSD, press the* **MODE** *button on the remote control to select the band from FM NR ON, FM NR OFF, or AM MONO.*

*Step 2) Use joystick* **LEFT** *and* **RIGHT** *to select the frequency.*

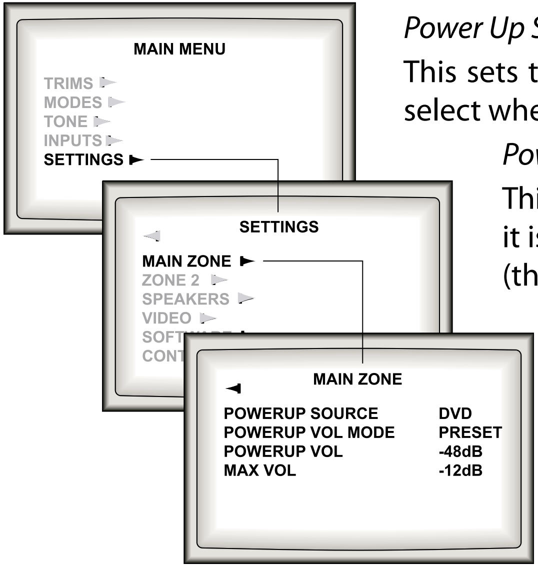
*Step 3) Press the joystick* **CENTER** *to enter that frequency into preset memory and play that station.*

*Step 4) Use the joystick* **DOWN** *button to move to the next preset down on the screen. The bottom arrow on each screen leads to the next page of presets.*

*Step 5) Repeat this for all the presets you want to set, then press* **EXIT** *when finished.*


Step 1
Step 2
Step 3
Step 4
Step 5
GUIDE
MENU
MODE ◄
MODE ►
EXIT
INFO

# SETTINGS Menus


MAIN MENU
TRIMS
MODES
TONE
INPUTS
SETTINGS
SETTINGS
MAIN ZONE
ZONE 2
SPEAKERS
VIDEO
SOFT
CONT
MAIN ZONE

POWERUP SOURCE DVD
POWERUP VOL MODE PRESET
POWERUP VOL -48dB
MAX VOL -12dB

## MAIN ZONE Menu

*Power Up Source*

This sets the input source which the **EMO** button will then always select whenever the DMC-1 is turned on.

*Power Up Volume Mode*

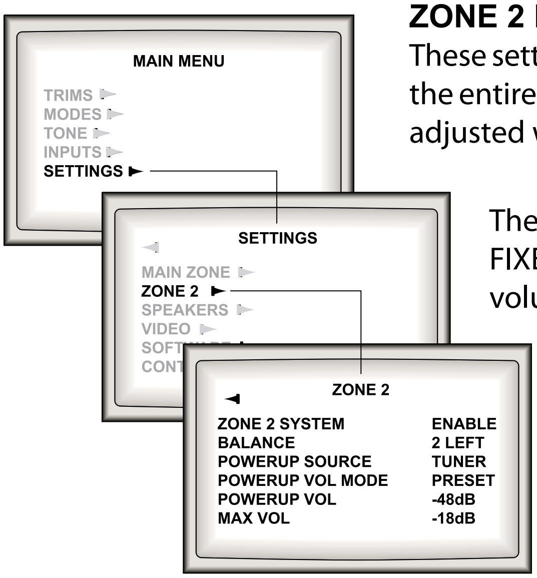
This lets you choose the volume level the DMC-1 reaches when it is turned on. You can select from a PRESET level, set below (the power-up volume), or it can play at the LAST level it was playing before it was turned off. The DMC-1 will always turn on at the level set here, but it can be adjusted to any level afterwards.

*Power Up Volume*

This allows you to set the PRESET volume level mentioned above. You might want to set it to a low level to avoid any surprises upon turn-on, especially if other users like loud music.

*Max Volume*

The volume can be set to not exceed a certain level chosen by you. This is useful if you have sensitive speakers, sensitive neighbors, or you would rather not have others play your system too loud. Finally, a smart preamplifier where *YOU* can police the volume without even being there!


MAIN MENU
TRIMS
MODES
TONE
INPUTS
SETTINGS
SETTINGS
MAIN ZONE
ZONE 2
SPEAKERS
VIDEO
SOFT
CONT
ZONE 2

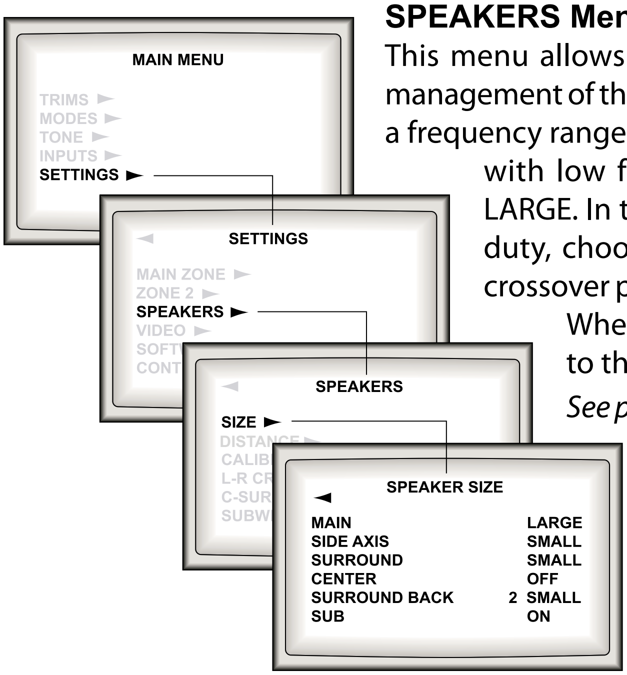
ZONE 2 SYSTEM ENABLE
BALANCE 2 LEFT
POWERUP SOURCE TUNER
POWERUP VOL MODE PRESET
POWERUP VOL -48dB
MAX VOL -18dB

## ZONE 2 Menu

These settings are like those described for the Main Zone. In addition, the entire Zone 2 can be enabled or disabled, and the stereo balance adjusted with this menu.

The Power Up Volume has three options: PRESET, LAST and FIXED. The FIXED option allows you to set the Zone 2 to a fixed volume, not adjustable with the remote. PRESET and LAST are as described for the Main Zone.

# SETTINGS Menus (Continued)

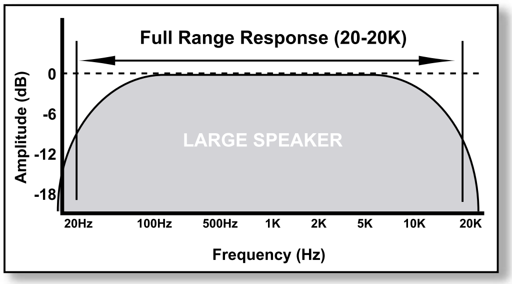


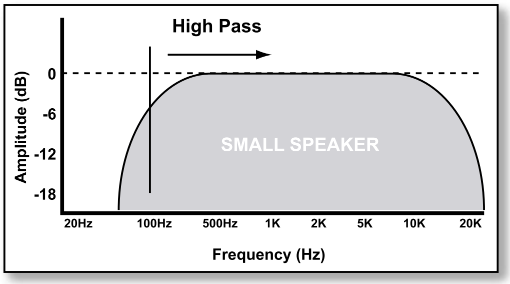
MAIN LARGE
SIDE AXIS SMALL
SURROUND SMALL
CENTER OFF
SURROUND BACK 2 SMALL
SUB ON

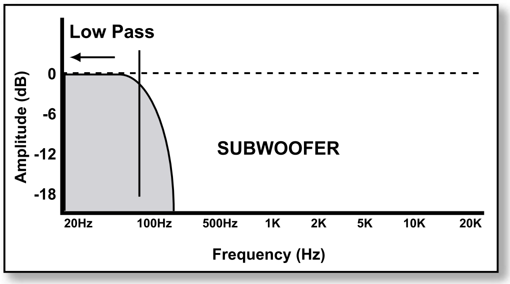
## SPEAKERS Menu - SIZE

This menu allows you to enter the size of your speakers. The bass management of the DMC-1 will then automatically assign each speaker a frequency range based on your preferences. For full range speakers with low frequency capabilities, you will probably choose LARGE. In the case that speakers are not capable of full range duty, choosing the SMALL setting will engage a high pass crossover point at the point which is chosen for the subwoofer. When SMALL is chosen, the low frequency range is sent to the subwoofer.

*See pages 60 and 63 for more details on bass management and information regarding the adjustment of the bass management crossover point.*







### *MAIN Speakers*

Select **LARGE** for any speakers which are capable of good bass performance. Frequency response will be FULL RANGE.

Select **SMALL** for any speakers such as satellites with 5 or 6 inch woofers. They will then receive the higher frequency range above the crossover point selected for the subwoofer. Remember that if you are not completely sure (or if you choose to play it safe at first) you can select this setting to get things started and see how much (if anything) is missing from the audio signal content in the MAIN speakers.

### *SIDE-AXIS Speakers*

Select **LARGE** for any speakers which are capable of good bass performance. Frequency response will be FULL RANGE.

Select **SMALL** for any speakers such as satellites with 5 or 6 inch woofers. They will then receive the

# SETTINGS Menus (Continued)

higher frequency range above the crossover point selected for the subwoofer. Remember that if you are not  completely sure (or if you choose to play it safe at first) you can select this setting to get things started and see how much (if anything) is missing from the audio signal content in the MAIN speakers.

Select **OFF** if you have no side-axis speakers. The size is always the same as the main speakers, so do not set the mains to LARGE, if the side-axis speakers are small and not capable of good bass performance.

### *SURROUND Speakers*

Select **LARGE** for any speakers which are capable of good bass performance. Frequency response will be FULL RANGE.

Select **SMALL** for any speakers such as satellites with 5 or 6 inch woofers. They will then receive the higher frequency range above the crossover point selected for the subwoofer. Remember that if you are not  completely sure (or if you choose to play it safe at first) you can select this setting to get things started and see how much (if anything) is missing from the audio signal content in the MAIN speakers.

Select **OFF** if you have no surround speakers.

### *CENTER Speaker*

In the **OFF** position, the center channel information is redirected to the fronts. This is sometimes known as a "PHANTOM" center channel.

In the **ON** position, the center channel can be configured in the same manner as the MAIN speakers (Large or Small).

### *SURROUND BACK Speakers*

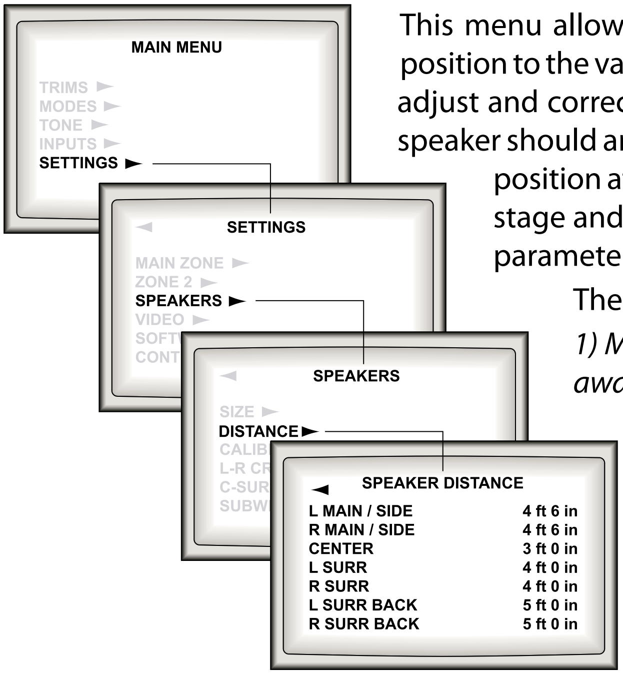
Select **OFF** if you have no surround back speakers. The information will be shared among the other surround speakers, creating a phantom back channel.

### *SUBWOOFER*

Select **ON** if you have a subwoofer. It will then receive any LFE signals (from 5.1, 6.1 sources), and the bass from any channels set to **SMALL**. If you have no subwoofer, you would obviously need to select **OFF** so that other speakers in the system can receive the bass that is otherwise handled by the subwoofer.

*Note: the bass management does not work for the 8-Channel input, or for Zone 2. Therefore the speaker size settings will have no effect and these channels will always be full range.*

# SETTINGS Menus (Continued)



L MAIN / SIDE 4 ft 6 in
R MAIN / SIDE 4 ft 6 in
CENTER 3 ft 0 in
L SURR 4 ft 0 in
R SURR 4 ft 0 in
L SURR BACK 5 ft 0 in
R SURR BACK 5 ft 0 in

## SPEAKERS Menu - POSITION

This menu allows you to enter the distance from your listening position to the various speakers. The DMC-1 will then automatically adjust and correct the speaker delay times. The sound from each speaker should arrive at the listener seated in the primary listening position at the correct time. Please note that the best sound stage and imaging will result from careful attention to this parameter, especially for the FRONT speakers.

The procedure is as follows:

*1) Measure (in feet and inches) how far each speaker is away from the center listening position of your home theater.*

*2) In the OSD menu, use the remote control joystick arrow buttons to enter the distance in feet for each speaker.*

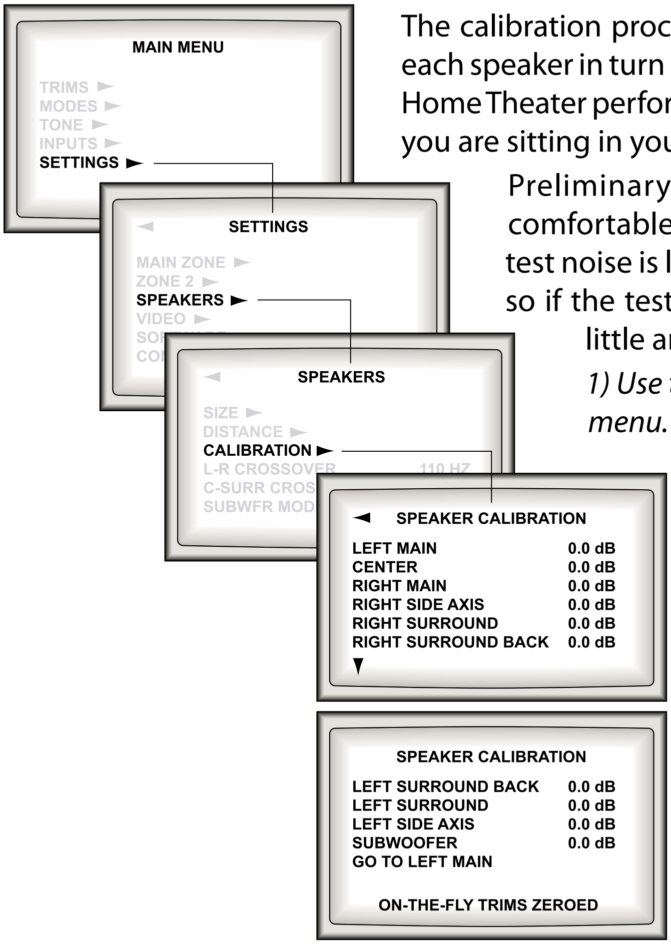
*3) The DMC-1 automatically sets the appropriate delays for each speaker so the sounds arrive at the primary listening position at the correct time.*

*4) Use this table to record your speaker distance measurements*

| SPEAKER POSITION | DISTANCE |
|---|---|
| ***LEFT MAIN / SIDE*** | |
| ***RIGHT MAIN / SIDE*** | |
| ***CENTER SPEAKER*** | |
| ***LEFT SURROUND*** | |
| ***RIGHT SURROUND*** | |
| ***LEFT SURROUND BACK*** | |
| ***RIGHT SURROUND BACK*** | |

***Speaker Placement Tip*** *- There is no substitute for well placed speakers, especially in pairs and especially in the main front (L,C,R) positions. If you can place the main speakers equidistant (at similar distances) from the primary listening position, you will enjoy the most balanced sound levels from most points in the room. The farther away or closer the left speaker is from the listener (when compared to the right speaker), the more delay one will have over the other. Sitting nearest the speaker with a high degree of delay does not sound natural. Read more about speaker placement tips in the "Speaker Placement Tips" section.*

# SETTINGS Menus (Continued)



LEFT MAIN 0.0 dB
CENTER 0.0 dB
RIGHT MAIN 0.0 dB
RIGHT SIDE AXIS 0.0 dB
RIGHT SURROUND 0.0 dB
RIGHT SURROUND BACK 0.0 dB

LEFT SURROUND BACK 0.0 dB
LEFT SURROUND 0.0 dB
LEFT SIDE AXIS 0.0 dB
SUBWOOFER 0.0 dB
GO TO LEFT MAIN

ON-THE-FLY TRIMS ZEROED

## SPEAKERS Menu - CALIBRATION

The calibration procedure allows you to adjust the volume level of each speaker in turn until they are all equal. This will give you the best Home Theater performance. You should only do this calibration when you are sitting in your usual listening/viewing position.

Preliminary: Play a movie and adjust the volume for a comfortable listening level. The volume of the calibration test noise is linked to the setting of the main volume control, so if the test noise is too quiet, turn the main volume up a little and retry.

*1) Use the OSD to navigate to the SPEAKER CALIBRATION menu.*

*2) Press the remote's joystick down to turn on the noise generator. While the test signal is playing in each speaker, its level can be adjusted using the joystick left/right buttons. Adjust each speaker in turn until they are all equal in volume.*

*The best results are obtained if you use a Sound Pressure Level (SPL) Meter. This is a hand held meter which will accurately measure and display the sound level. Adjust all of the speakers until they are playing within 1 dB of each other. Without a meter, you can still obtain good results with careful listening.*

*3) Repeat the procedure several times for each speaker until you are satisfied they are playing at the same level.*

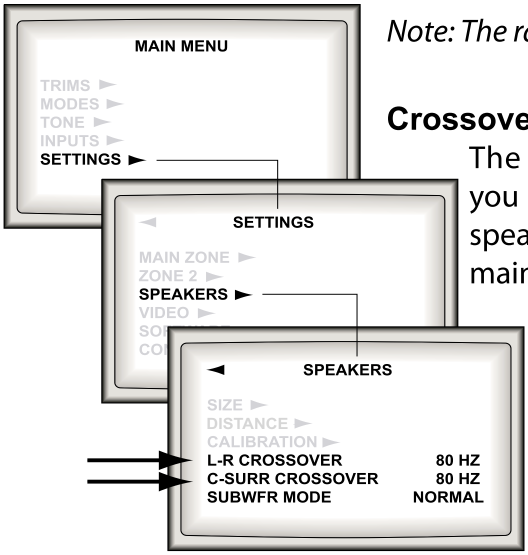
*4) Press the joystick **UP** to return to the top of the menu, and then press joystick **LEFT** to exit. The calibration noise generator will turn off.*

*The main volume control adjusts the volume of all of the speakers up and down at the same time. They keep the same relative levels you in this menu.*

| SPEAKER POSITION | LEVEL (in dB) |
|---|---|
| *LEFT MAIN SPKR* | |
| *CENTER SPKR* | |
| *RIGHT MAIN SPKR* | |
| *RIGHT SIDE AXIS* | |
| *RIGHT SURROUND* | |
| *RIGHT SURR BACK* | |
| *LEFT SURR BACK* | |
| *LEFT SURROUND* | |
| *LEFT SIDE AXIS* | |
| *SUBWOOFER* | |

# SETTINGS Menus (Continued)

Dolby Digital, Dolby Pro Logic and DTS soundtracks are designed to be played back on a properly calibrated Home Theater. The sounds from each speaker will be at the correct relative levels, as the movie sound director designed them. Repeat the calibration if you change any speakers or your external power amplifiers. You should also run a new calibration whenever you move your seating relative to the speakers.



L-R CROSSOVER 80 HZ
C-SURR CROSSOVER 80 HZ
SUBWFR MODE NORMAL

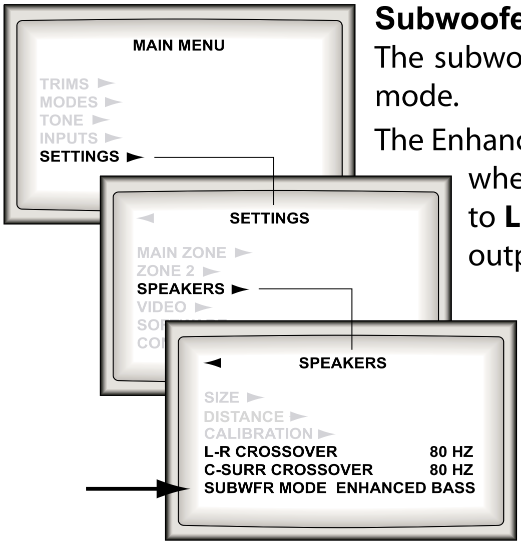
*Note: The range of adjustment is +/– 10 dB for each speaker.*

### Crossover Adjustment

The bass management system built into the DMC-1 allows you to redirect the low frequencies of your main and surround speakers to a subwoofer. The crossover point of the left and right main speakers can be selected from 40 Hz to 160 Hz. There is an additional selection for the center and surround speakers with the same range of adjustment between 40-160Hz.

If you set the **L-R CROSSOVER** to **80 HZ** (a good starting point), left and right channel main speakers set to **SMALL** receive frequencies above 80 Hz. The frequencies below 80 Hz are then redirected to the subwoofer. The same scenario applies to the **C-SURR** setting for center and surround speakers.

Most manufacturers provide a -3 dB specification for their speakers. This is the frequency where the speaker's output has dropped by 3 dB. Set the DMC-1 crossover to this frequency or above. If you cannot find this, set the crossover to 80 Hz (the default). Set your subwoofer's own crossover control to maximum frequency or bypassed mode. If it is set lower than the DMC-1, there would be a hole in the mid bass, and bass information would be missing.



L-R CROSSOVER 80 HZ
C-SURR CROSSOVER 80 HZ
SUBWFR MODE ENHANCED BASS

### Subwoofer Mode

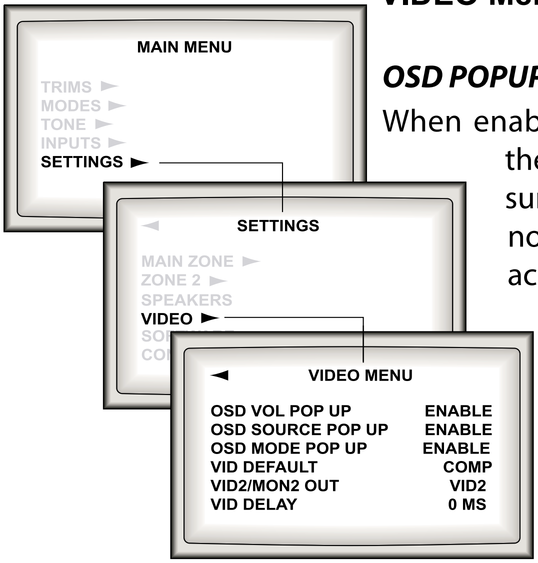
The subwoofer output can be set to **NORMAL** or **ENHANCED BASS** mode.

The Enhanced Bass mode provides an output to your subwoofer even when you are listening to a stereo source with main speakers set to **LARGE**. In the Normal mode, there would be no subwoofer output in this case, and the bass would only come from the main speakers.

The Enhanced Bass mode has no effect if the main speakers are set to **SMALL**, as the subwoofer is automatically engaged. It also has no effect in 5.1 or greater surround modes.

# SETTINGS Menus (Continued)

## VIDEO Menu



| | |
|---|---|
| OSD VOL POP UP | ENABLE |
| OSD SOURCE POP UP | ENABLE |
| OSD MODE POP UP | ENABLE |
| VID DEFAULT | COMP |
| VID2/MON2 OUT | VID2 |
| VID DELAY | 0 MS |

### *OSD POPUP (Volume, Source, and Mode)*

When enabled, a “pop-up” message appears on your TV any time the volume (including mute or on-the-fly trims), source, or surround mode are changed. The OSD circuit in the DMC-1 is not switched into the video path unless called up by an OSD action. This allows for the best possible video reproduction quality. When the OSD display activates, it is normal to see a slight flicker on the screen. This menu allows you to choose which, if any features, are enabled for OSD features after initial setup of the DMC-1.

*Note: The OSD “pop-up” does not function on the component video output. This is intentional, as we feel that the OSD insertion circuitry will degrade the performace of the component video circuitry due to the ultra wide bandwidth requirement for optimal component video performace.*

### *VIDEO DEFAULT*

Select the video output where the “pop-up” text appears, either S or composite video, but not both. The full OSD is not affected by this menu item, as it is available on both.

### *VID2/MON2 OUT*

**VID2**: the VCR2/MON2 outputs can be used for recording to a second VCR. There is no OSD, and the output is muted when VID2 is chosen as an input (to prevent feedback).

**MON2**: the VCR2/MON2 output becomes a second monitor output (with OSD) for another TV. It will not mute when VID2 is chosen.

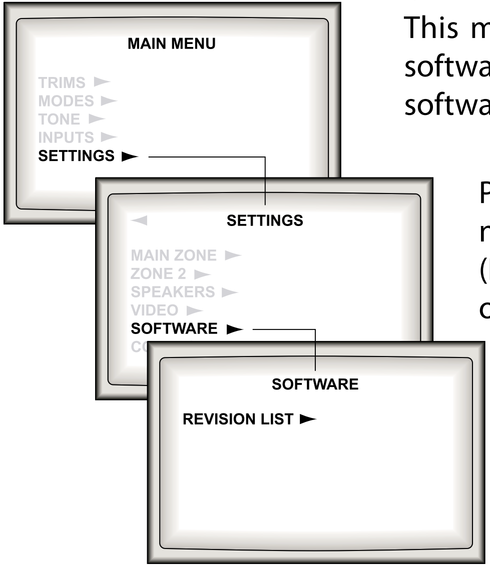
### *VIDEO DELAY*

This adjustment is useful if you have an external video processor in your system. Video signals may become delayed with respect to the audio signals. Although it is called Video Delay, it is actually a delay adjustment of the audio signals relative to the video signals.

Use the remote’s joystick pad to adjust the delay in one millisecond steps. An equal amount of delay time is added to all audio channels.

*Note: The speakers keep their relative time delay settings which the DMC-1 calculates from the Speaker Position Menu settings. The video delay is just added on top. Leave the video delay at zero if you do not have an external video processor or if you detect any noticeable synchronization problems with dialogue.*

# SETTINGS Menus (Continued)

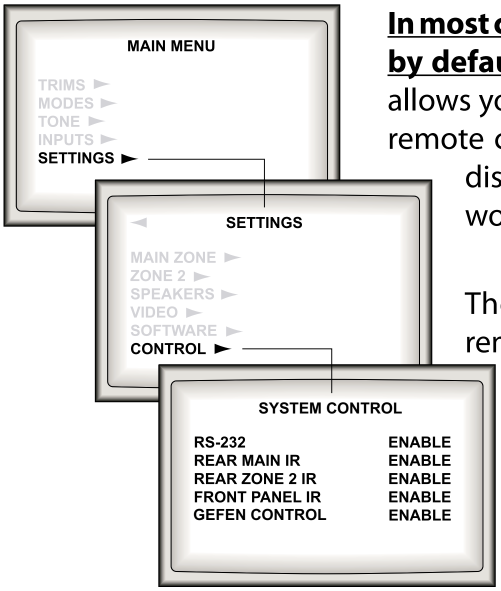


## SOFTWARE Menu

This menu is used to show the current revision levels of system software within your DMC-1. It also allows the DMC-1 Flash memory software to be upgraded by use of the RS-232 port.

Please note that to accomplish the software upgrade, you will need to connect the DMC-1 to a computer with a serial cable (DB-9 type). The latest version of the DMC-1 software is available on the Emotiva website. You will need to download this to your computer before connecting and upgrading the DMC-1.

For detailed instructions on this procedure and to check for the latest software version, please visit the Emotiva website at www.emotiva.com.



RS-232 ENABLE
REAR MAIN IR ENABLE
REAR ZONE 2 IR ENABLE
FRONT PANEL IR ENABLE
GEFEN CONTROL ENABLE

## CONTROL Menu

**In most cases, there is no need to change these settings (all enabled by default).** You should make any changes with caution. This menu allows you to enable or disable the RS-232 port and the rear panel IR remote control connections. The front panel IR receiver can also be disabled if required, but make sure the rear panel IR receiver is working correctly and is still active before doing this.

The front panel IR can be re-enabled by holding down the remote's **MENU** button for several seconds, while pointing it at the front IR window.

For HDMI switching to function, you MUST make sure the "**GEFEN CONTROL**" is enabled. Gefen engineers the external HDMI switch box used on the DMC-1 so that is the name you will see in the System Control Menu of the OSD. Enabling the switch means that HDMI video signals will switch between the DVD and SAT inputs to the HDMI output. **Audio is not switched through the HDMI connections on the DMC-1 nor are any of the other video inputs "transferred" over to the HDMI output.** If you do not connect any HDMI inputs, there will be no output on HDMI. If you only connect one of the two HDMI inputs, there will only be a video signal on the HDMI output when that source is selected. This may mean that you need to use both HDMI and another video connection to your television to bring in all the video sources switched through the various video inputs present on DMC-1 and the HDMI switcher.

# Special Features of the Emotiva DMC-1

## Bass Management

Unlike higher frequencies, it is difficult to discern exactly from which direction lower bass is coming. The DMC-1 has a bass management system which takes advantage of this effect. It allows you to choose whether your speakers will play the full frequency range, or if the bass will be redirected to the subwoofer. The advantages of redirecting the bass to a subwoofer include the following:

- *The overall bass of the system is improved as subwoofers are specially designed for this frequency range.*
- *The subwoofer can simultaneously play the bass from all of the speakers, in addition to it's own low frequency effects channel (LFE).*
- *There is no loss in perception of the position of movie or music sound effects, as the ear cannot easily locate the position of low frequency sources.*
- *Smaller speakers can be used for main front, center and surrounds, as they do not have to reproduce the low frequency range. This leads to a saving in speaker expense and room space. A subwoofer* ***is required*** *if the front speakers are set to* **SMALL**.
- *Your amplifiers do not waste power reproducing the low frequency range when using a powered subwoofer. Nearly all home audio subwoofers are self powered.*

*See page 60 for information regarding the adjustment of the bass management crossover point. Note: The SPEAKER SIZE menu is used to set the bass management correctly for your speaker system. See pages 56-57.*

Dolby Digital and DTS modes are designed especially for complete systems with front, center, and surround speakers and subwoofers. You need all of the speakers to get the best performance from your Home Theater. If you do not have a subwoofer connected, then you should not use the bass management system (so set all the speakers to Large). Without a subwoofer, you will be missing the 5.1 LFE (low frequency effects) information.

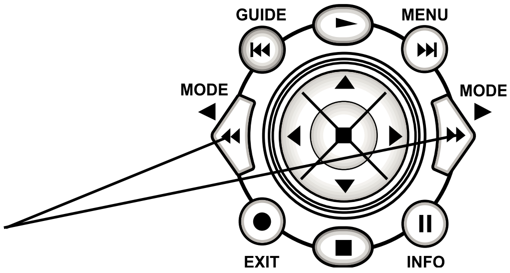
Considering the advantages of the bass management system, you might try setting all of your speakers to Small, even if they are capable of good low-frequency performance.

## Surround Modes for 2 Channel Source Material

For 2 channel input sources, you can choose from the following modes:

- STEREO
- DOLBY PRO LOGIC II or PRO LOGIC IIx
- PARTY
- JAZZ CLUB
- DTS Neo:6
- SOURCE DIRECT

*The mode selection can be made from the front panel MODE buttons, or from the remote control.*



### *DOLBY PRO LOGIC II and DOLBY PRO LOGIC IIx*

This is the conventional two-channel stereo mode with sound from your left and right speakers. The DMC-1 bass management lets you use your subwoofer to handle the lower frequency range. Dolby Pro Logic II has several options which can be set using the On Screen Display (OSD) menus. These include:

**MOVIE** mode for Dolby Surround soundtracks. These are decoded by the DMC-1 into separate channels: left and right channels for off-screen imaging, a center channel for most on-screen dialog, and stereo surround channels for ambience and special effects.

**MUSIC** mode for listening to any stereo material. This mode also includes three options:

- *Center Width, which spreads the center channel across the front soundstage.*
- *Panorama, which wraps the left and right channels around you.*
- *Dimension, which adjusts the front/rear balance of the PLII or PLIIx effect.*

Try the **PLII or PLIIx MUSIC** modes for all of your stereo programs, and adjust these extra options to suit your taste.

**PRO LOGIC** IIx extends the Dolby Pro Logic II technology by adding stereo full range surround back channels. Use this feature instead of Dolby Pro Logic II if you are using the surround back channels in your system. This mode also features the Music and Movie modes as described above.

**PLII MATRIX** mode can be used for mono sources, or for FM programs with poor stereo reception.

**PLII PRO LOGIC** mode emulates the original standard surround mode. It can be used for source material which is not of optimum quality, or if you just feel nostalgic for the way things were.

### *PARTY*

This extra stereo mode copies the front speaker signals to the other speakers in your system. This mode adds tremendous presence to your stereo sources and is great for parties and casual listening alike. The OSD menu can be used to select which speakers are active in this mode.

### *JAZZ CLUB*

In this DSP mode, the surrounds simulate the ambiance caused by rear reflections and effects of a small to medium sized venue. This is useful for adding surround sound effects to stereo sources. The ambiance effect can be varied using the OSD MODES menu.

### *DTS Neo:6*

The **CINEMA** option can produce up to six full range, separate channels and a subwoofer output from stereo matrix surround sources. This enhances the playback of sources such as surround sound video tapes, Laser Discs and broadcast TV programs.

The **MUSIC** option can expand normal stereo programs into six channels. It does so in a natural sounding way, which enhances the listening experience.

### *SOURCE DIRECT*

This mode bypasses all DSP, Tone, and bass management circuits. It is stereo analog only, and offers the shortest signal path through the DMC-1. Only the front left and right speakers are engaged. Do not use this mode for digital-only sources, as it only routes the analog audio. To prevent damage to your speakers, this mode only works if your front speakers are set to Large.

In addition to these modes, and those offered for multi-channel sources, the side-axis speakers will widen the front sound stage and fill in the sound field between the front speakers and the surrounds. Note that the side-axis speakers are active in stereo as well as multi-channel operation.

## Surround Modes for Multi-Channel Sources

For multi-channel sources, the DMC-1 will automatically select the correct mode from one of the following:

- DOLBY DIGITAL
- DOLBY DIGITAL EX
- DTS
- DTS-ES MATRIX
- DTS-ES DISCRETE

If you want to try one of the modes on the previous page, you should select a 2-channel output from your DVD player's options menu.

*NOTE: In your DVD player's audio setup menu, set the digital output to* ***BITSTREAM.*** *If this is not set correctly, the DMC-1 cannot decode the digital information.*

### *DOLBY DIGITAL 5.1*

Dolby Digital and DTS are "5.1" surround systems with five main channels: left front, center, right front, left surround, and right surround. Each channel can play the full frequency range and is independent of the other channels. The ".1" denotes the subwoofer channel which plays the low frequency effects (LFE), also independent of the other channels.

Dolby Digital EX and DTS ES offer "Extended Surround." Both systems offer a surround back channel which effectively fills in the otherwise empty sound space behind you.

### *DTS (5.1)*

This mode is available if the DMC-1 automatically detects that a DTS encoded source is present at one of its digital inputs. Look for the DTS Logo on DVDs, Laserdiscs, CDs and other sources. You must select DTS from the DVD options menu to configure the DVD player to output a DTS BITSTREAM. The DMC-1 will then automatically recognize it as DTS.

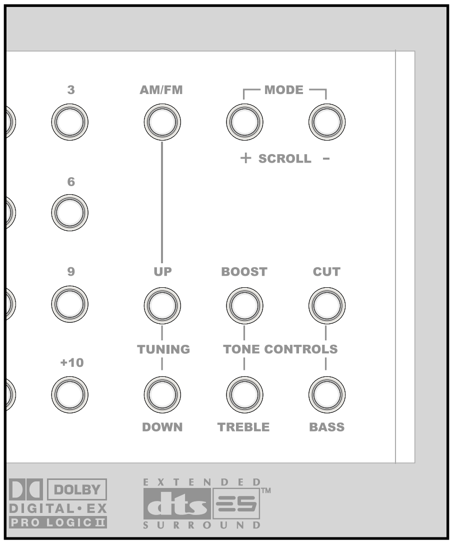
### *DTS ES (6.1)*

All DTS-ES sources have the surround back channel matrixed into the left and right surrounds. Newer DVD releases also have a discrete surround back channel, in addition to the same information matrixed.

**DISCRETE ES** sources: the DMC-1 DTS-ES discrete decoder will decode the discrete surround back channel. It also removes the surround back matrix from the left and right surrounds, and restores them to be fully independent channels.

**MATRIX ES** sources: If there is no discrete surround back channel, the DMC-1 decodes the matrixed surround back channel from the left and right surrounds, and restores them to fully independent channels.

## Tuner Operation



The Tuner is selected either by rotating the manual input selector on the front panel, or by touching the TUNER button in the remote's EMO mode. The front panel display shows the frequency of the last station you were listening to.

The FM Tuner can tune stations from 87.5 MHz to 108.0 MHz in 0.2 MHz steps (.05 MHz steps for some international models). The AM Tuner range is 530 kHz to 1710 kHz in 10 kHz steps (531 kHz to 1710 kHz in 9 kHz steps for some international models).

### Tuner and the OSD

Page 54 shows how to set up the Tuner using the on screen display.

### Tuning Stations Manually

Use the front panel AM/FM button to select either the AM or FM band, and then use one of these three ways to tune stations manually:

1. Touch UP or DOWN momentarily to change the tuner by one frequency step.
2. Hold UP or DOWN for a second or so, then release to start the scanning feature. The DMC-1 will scan to the next station, pause on it for a few seconds to allow you to hear what is offered there, and then scan to the next, and so on. Pressing UP or DOWN stops the scanning process.
3. Hold UP or DOWN for an extended period to make the tuner speed across the band without stopping on a station. The tuner will begin scanning for stations when you release the button. Pressing UP or DOWN stops the scanning.
4. When a station is tuned, it can be set as a preset for easy recall, see "Setting the Presets" in the next column.

### Tuning Stations Directly

Use the AM/FM button to select either the AM or FM band and then press the DIRECT button. Within a few seconds, enter the station's frequency by using the preset number buttons. For example, to tune to radio station 97.3, press DIRECT, then 9, then 7 and then 3.

### Setting the Presets

Once you have tuned in a station, press and hold a preset button until the display flashes to show the memory has been set. Use the +10 button to add presets higher than 9, and hold the last button pressed for a few seconds.

### Recalling a Preset Station

Once you have selected the Tuner, you can quickly recall a station by pressing its preset number, either on the front panel or by using the remote's numeric keypad, FAV buttons, or the channel up and down buttons.

### Scanning Presets

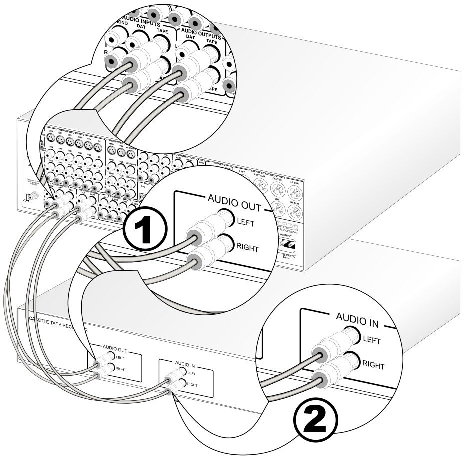
To scan through the presets, press and hold the FM/AM button. Touch it again to stop the scan.

# Recording

## Recording to a Tape Player

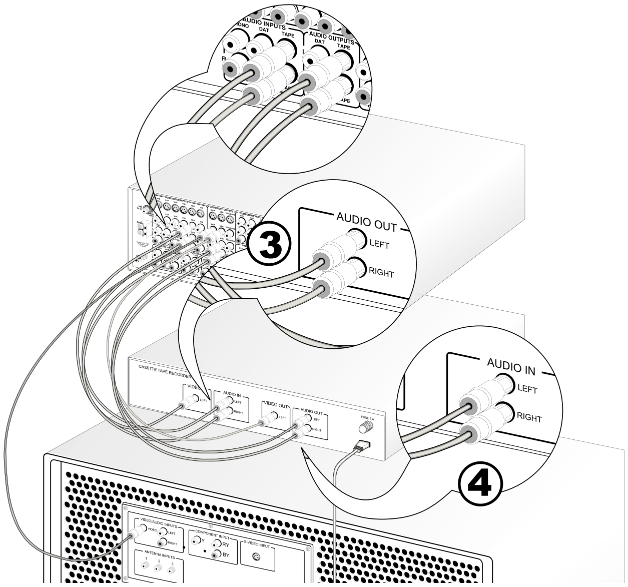
Input signals from an audio source playing in the DMC-1 can be recorded using the left and right audio outputs. The tape player will receive a straight copy of the analog source signal going in, unaffected by the volume, tone, or any surround modes. If you are playing a digital source, the tape player will receive a down mixed stereo analog signal for recording.

- *Select the source (such as CD) and play it through your system.*
- *Set your tape player to record and adjust the input levels for the best performance. Once the levels are correct, you can reset your source to the beginning and make your recording.*
- *Do not select another Main Zone input while you are recording.*


AUDIO INPUTS
AUDIO OUTPUTS
DAT
TAPE
AUDIO OUT
LEFT
RIGHT
1
AUDIO IN
LEFT
RIGHT
2
CASSETTE TAPE RECORDER

① *Connect "PLAY" from DMC-1 to Tape INPUTS*

② *Connect "RECORD" from DMC-1 to Tape OUTPUTS*


AUDIO INPUTS
AUDIO OUTPUTS
DAT
TAPE
AUDIO OUT
LEFT
RIGHT
3
AUDIO IN
LEFT
RIGHT
4
CASSETTE TAPE RECORDER

③ *Connect "PLAY" from DMC-1 to Tape INPUTS*

④ *Connect "RECORD" from DMC-1 to Tape OUTPUTS*

## Recording to a VCR

Any video source playing in the DMC-1 can be recorded using the left and right audio and the video outputs. The VCR will receive a straight copy of the source signal going in, unaffected by the volume, tone or any surround modes.

- *Select the video source and play it through your system.*
- *Set your VCR to record.*
- *Do not select another Main Zone source while you are recording.*
- *The VID2/MON2 output can also be used for recording, but first make sure that it is set to VID2 in the VIDEO menu of the OSD (see page 61). This output will then mute to prevent feedback whenever the VID2 input source is selected.*
- *Do not use the OSD while recording as the incoming video is shut off while the OSD is displayed*

## Zone 2 Operation

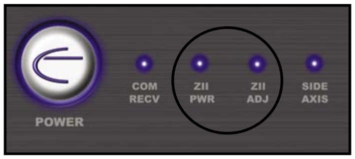
If you have an amplifier and a pair of speakers in a second room or area (Zone 2), they can play an analog stereo source independent of what is playing in the Home Theater room (Main Zone). You can also play the same source as selected in the Main Zone. Multi-channels sources will be down mixed to stereo, if applicable.

Zone 2 plays stereo sources, and is unaffected by the Tone controls, DSP, surround modes or bass management.

### Connections

The connections for Zone 2 are shown on pages 35-36.

Note: Zone 2 can play analog sources independent of what is playing in the Main Zone. It **cannot** play from a digital-only source unless that input is selected and playing in the Main Zone. To play a source such as a DVD or CD player in Zone 2 independent of the Main Zone, make sure you also connect the player's L-R analog audio output to the DMC-1.


POWER
COM RECV
ZII PWR
ZII ADJ
SIDE AXIS

*Use the front panel display to indicate when Zone 2 is powered and when commands are received for Zone 2*

### Indicators

The front panel has two LED's to show the Zone 2 status:

Zone 2 Power This LED is always on when Zone 2 is on. If it is off, there will be no output to the Zone 2 amplifier.

### Zone 2 Adjust

This turns on whenever the Zone 2 source or volume is being changed.

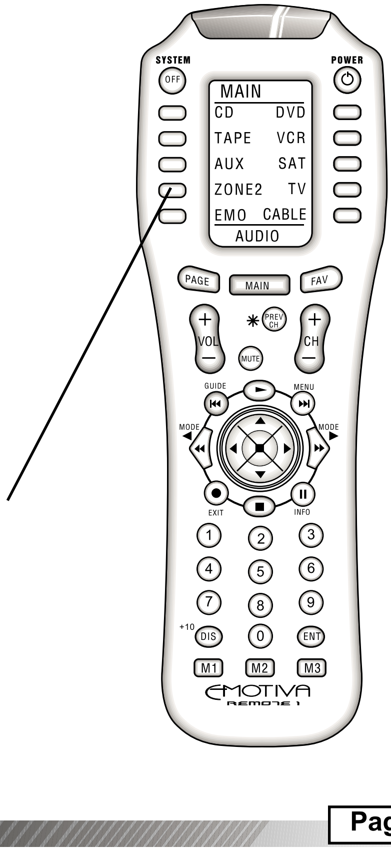
*Note: if this is on, then any adjustments you make of volume or input, will affect Zone 2, not the Main Zone.*

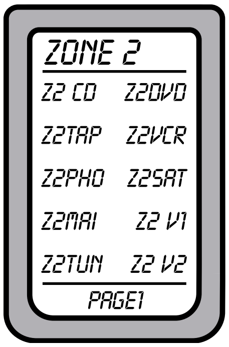
In addition to these LEDs, the front panel display will show the input and volume adjustment.

### Turning on Zone 2

Use the On Screen Display in the Main Zone to check that Zone 2 is enabled. (See page 55 for details). This enables the Zone 2 system, but it still has to be turned on.

Press the remote's ZONE 2 button. The remote's POWER, VOLUME and MUTE buttons then work for Zone 2. The remote display changes as in PAGE 1.

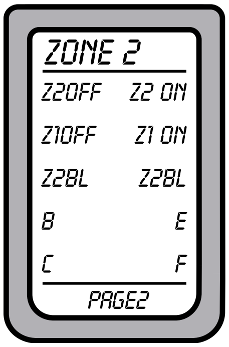

SYSTEM
POWER
OFF
MAIN
CD DVD
TAPE VCR
AUX SAT
ZONE2 TV
EMO CABLE
AUDIO
PAGE
MAIN
FAV
VOL
PREV CH
CH
MUTE
GUIDE
MENU
MODE
MODE
EXIT
INFO
1 2 3
4 5 6
7 8 9
+10 DIS 0 ENT
M1 M2 M3
EMOTIVA
REMOTE 1


ZONE 2
Z2 CD
Z2DVD
Z2TAP
Z2VCR
Z2PHO
Z2SAT
Z2MAI
Z2 V1
Z2TUN
Z2 V2
PAGE1

PAGE 1

This allows you to select the inputs to play in Zone 2. Z2MAI (main) allows Zone 2 to play whatever is playing in the Main Zone.

Press PAGE to show the next page:


ZONE 2
Z2OFF
Z2 ON
Z1OFF
Z1 ON
Z2BL
Z2BL
B
E
C
F
PAGE2

PAGE 2

This has discrete codes which are useful if you want to program the remote control with Macros.

Z2 OFF, Z2 ON : Zone 2 on or off.

Z1 Off, Z1 ON: Main Zone on or off.

Z2 BL: Use these two buttons to adjust the left-right balance of Zone 2.

B, C, E, F : These are extra buttons you can Learn over and re-Label with your favorite Zone 2 commands.

Press MAIN to return to PAGE 1, and press it again to return to the MAIN menu.

Note: Zone 2 can also be turned on and adjusted without using the remote. Press the Zone 2 button on the DMC-1 front panel, followed by Power, to turn it on (or off), or adjust the input source or volume.

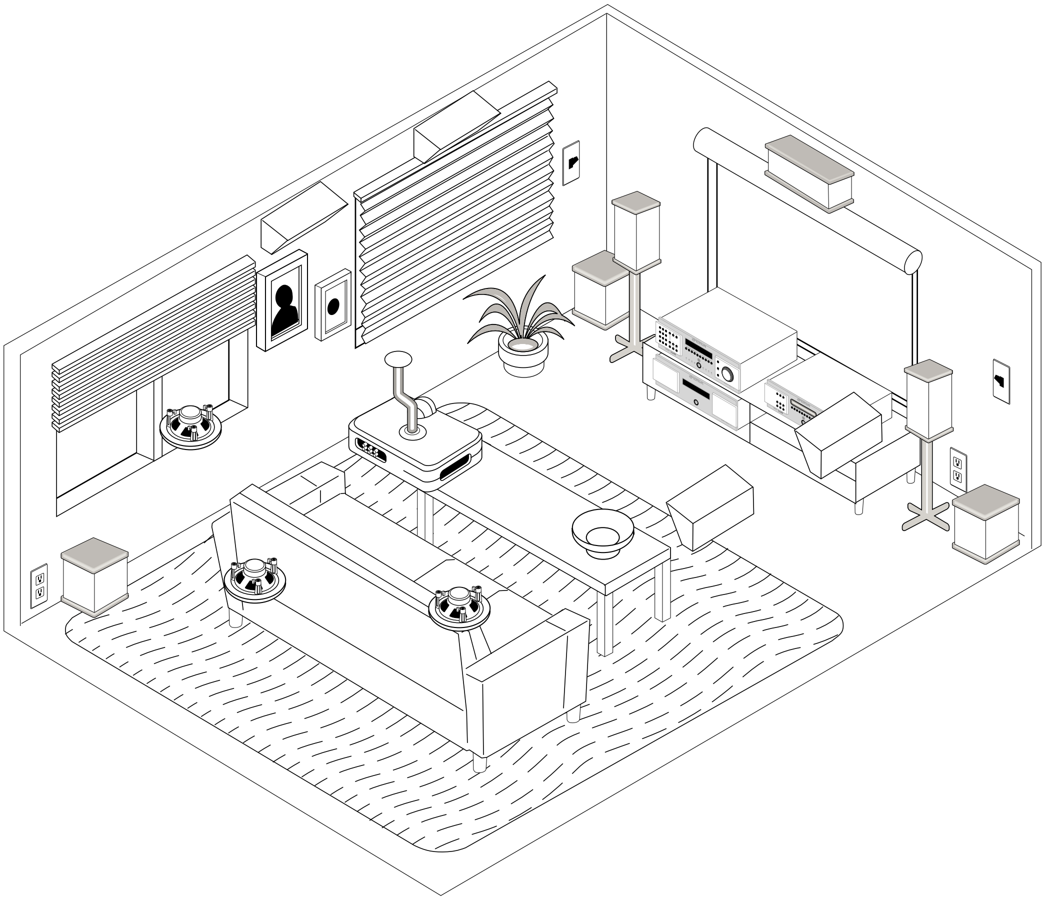
*Note: Zone 2 operations will work even if the Main Zone is off.*

## Software Upgrades on CD

The DMC-1 Flash memory software can be upgraded by connecting your PC to the DMC-1 RS-232 serial port, and downloading an update file from our website: www.emotiva.com. This is the preferred method, as the software can be updated relatively fast and the latest version is always available.

Alternatively, the DMC-1 flash memory can be upgraded using a CD from the Technical Support team at Emotiva. This CD will be available periodically when there are major software changes since the initial release. Specific instructions for this procedure will be included with the software CD.

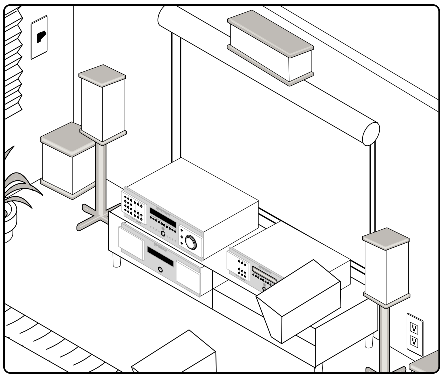
# Speaker Placement Tips



## Tips Before You Begin

Read this section thoroughly. There are a number of ways in which it may seem aesthetically pleasing to place speakers in a room that will ultimately result in a sound quality compromise. The placement of speakers is equally as important as the room itself. While there may be very little you can do about the room where your home theater is installed, you can choose placement of speakers within that room to maximize the sound quality of the system. Ultimately, this will give a much better result when you are enjoying your home theater and your new Emotiva DMC-1.

Overall, the best placement for front speakers is where the sound is directed at ear level. This means that the speakers themselves can be in positions lower (like small floor standing speakers) or higher (like in-wall or in-ceiling speakers) as long as the sound is "pointed" toward the listeners and preferably around ear level. This is not necessarily the case with the rear speakers or the side axis speakers. Read each of the sections carefully for the most appropriate positioning. A subwoofer is also a little challenging to install depending on the room. In multiple subwoofer installations, the positioning of the woofers to the listener as well as to each other is critical because there can be problems with cancellation if optimum placement is not observed.



Place LEFT, CENTER, and RIGHT main speakers at equal distances from the listening position.

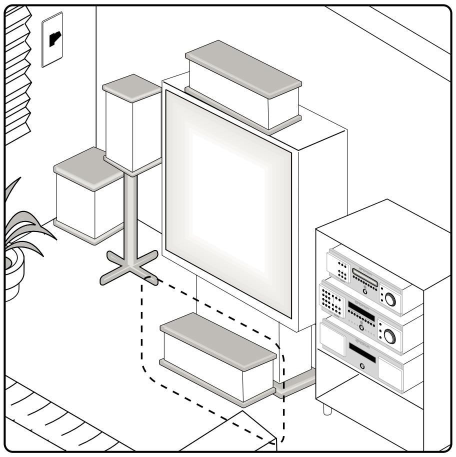
### The Front Speakers

You should closely follow the placement recommendations of your speaker manufacturer, with the addition of the following points:

- *The left and right front speakers should be positioned so that your TV is exactly centered between them. This will help focus your attention towards the screen.*
- *For the best overall imaging, the left speaker should be set exactly the same distance and angle away from your listening position as the right speaker. It is recommended that you use a tape measure to set them up to be the same distance away, within about half an inch tolerance.*

If you have a smaller TV, the speakers should be no more than two feet away from the sides of the TV. If possible, have the center, left and right speakers at the same height (within two feet). This will help give a smooth transition when sound effects move from speaker to speaker.

Ideally, the speakers should be no closer than two feet from the rear and side walls, in order to reduce any reflections that might upset the imaging. If your speakers are closer than this, you can experiment by adding sound deadening material such as drapes on the walls to reduce any unwanted reflections.



Whenever possible, place the center speaker no more than 12" (25.4cm) above or below the front speakers

### The Center Speaker

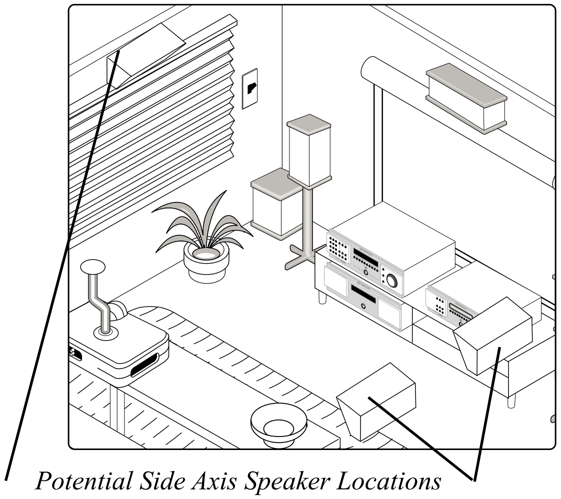
Most movie dialog will come from the center speaker, so careful positioning is an important part of a good home theater system. Your eyes and ears should focus your attention towards the center of the screen.

The center speaker can sit on top, or directly underneath the TV, as long as it is located on the centerline and not off to one side. Ideally you would try to maintain a deviation from the center line of the speakers of less than 12". This means the center speaker will not be lower or higher than 12" to the center measurement of the LEFT and RIGHT MAIN speaker center measurements.

Position the front face of the speaker close to the front edge of the TV cabinet. (The sound waves may otherwise reflect off the top of the TV cabinet and distort the center imaging).

In some systems, two center speakers are used; one on either side of the TV. As they are in mono, the result is a sound image that is positioned exactly at the screen center.

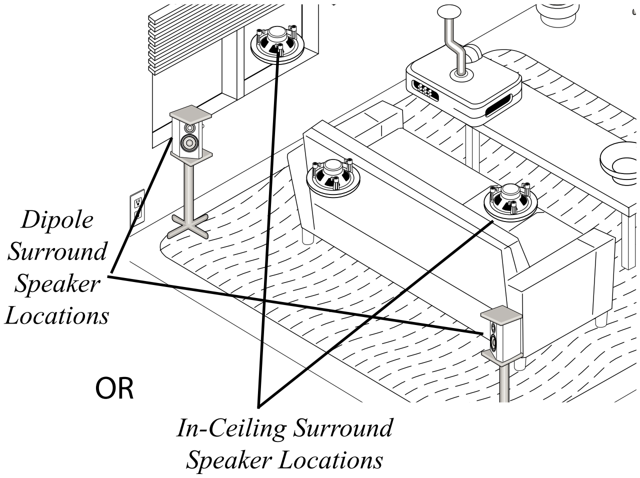
## Side-Axis Speakers


Potential Side Axis Speaker Locations

The DMC-1 has two side-axis channels which are matrixed and derived from the left and right front channels, so they are available in stereo as well as surround modes. Use the OSD SPEAKER SIZE menu to turn the SIDE-AXIS channels ON or OFF (see pages 56-57).

In the diagram to the left, typical placement of the side-axis speakers is depicted by the speakers that appear to be "suspended" where walls are in the room. Another appears above the window on the left side of the drawing. Wherever you position them, place these speakers along the side walls, close to the fronts. You can also angle them in towards your listening position for better results. You should not use a surround or effect speaker (such as a dipole) for side axis speakers. Direct radiating speakers will give the best result without interfering with the clarity and presence of the main speakers in the front left, center, and right sides.

## The Surround Speakers


Dipole Surround Speaker Locations
OR
In-Ceiling Surround Speaker Locations

Place each surround speaker to be an equal distance away from your central listening position and keep them at least one or two feet above ear level.

The diagram to the left shows the use of dipole surround speakers. These are usually positioned to the side of your listening position. They radiate forwards and backwards and have a quiet null zone (the "apex" of the triangular shape) which should point towards the listener. The overall effect is that you cannot hear the direct sound from the surround speakers because they don't directly radiate into the listening space. Most manufacturers of dipole speakers intended for use as an effects or surround speaker have excellent details on optimum positioning for the best overall results based on the application.

Conventional surround speakers can be placed behind the listener, on the rear walls or the side walls or in the ceiling (as the diagram indicates). Adjust the angle so they do not point directly at the listener but cause reflections from the sidewalls, floor, or the ceiling. Avoiding direct aim at the listening positions will give the effect of broadening the rear soundstage so that you cannot distinguish the sound as coming from a small box on the wall but from a larger area behind you.

## Surround Back Speakers

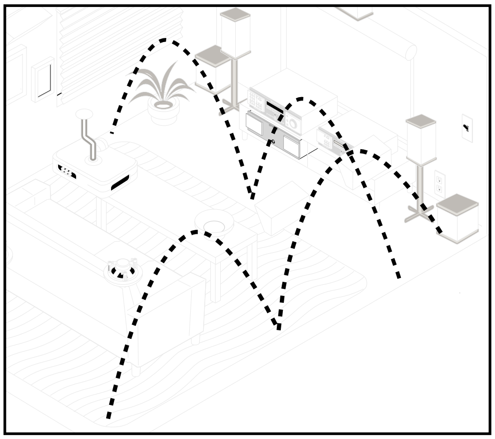
The DMC-1 has two extra outputs for surround back speakers. These create a wonderful sense of realism in surround effects during playback of Dolby Digital EX, Dolby Pro Logic IIx, and DTS ES.

The DMC-1 can be configured for one or two surround back speakers. Ideally, all the surround speakers should be of the same make and model, and fitted at similar heights to produce a smooth continuous sound field. If you are connecting one surround back speaker, connect its amplifier input to the DMC-1 **LEFT CHANNEL SURROUND BACK** output. Place the speaker behind your listening position.

## Subwoofer Location

The DMC-1 has identical output connections for up to three subwoofers, in addition to a fourth, balanced sub output.

A subwoofer typically sounds best in a corner with at least 5 feet of wall to either side. Due to the short wavelengths of high-frequency sounds, they don't interact strongly with the size and shape of a room. Lower frequencies long wavelengths that can cause "Standing wave" problems. Placing the subwoofer in a corner usually creates the best possible situation for the sound to interact with the room, allowing even distribution of the bass frequencies. Often the corner that offers nearby placement to the front speakers may yield the best results, but you should try several locations before settling on just one.



*Standing waves depicted in a room. "Peaks" are good, "Dips" are bad.*

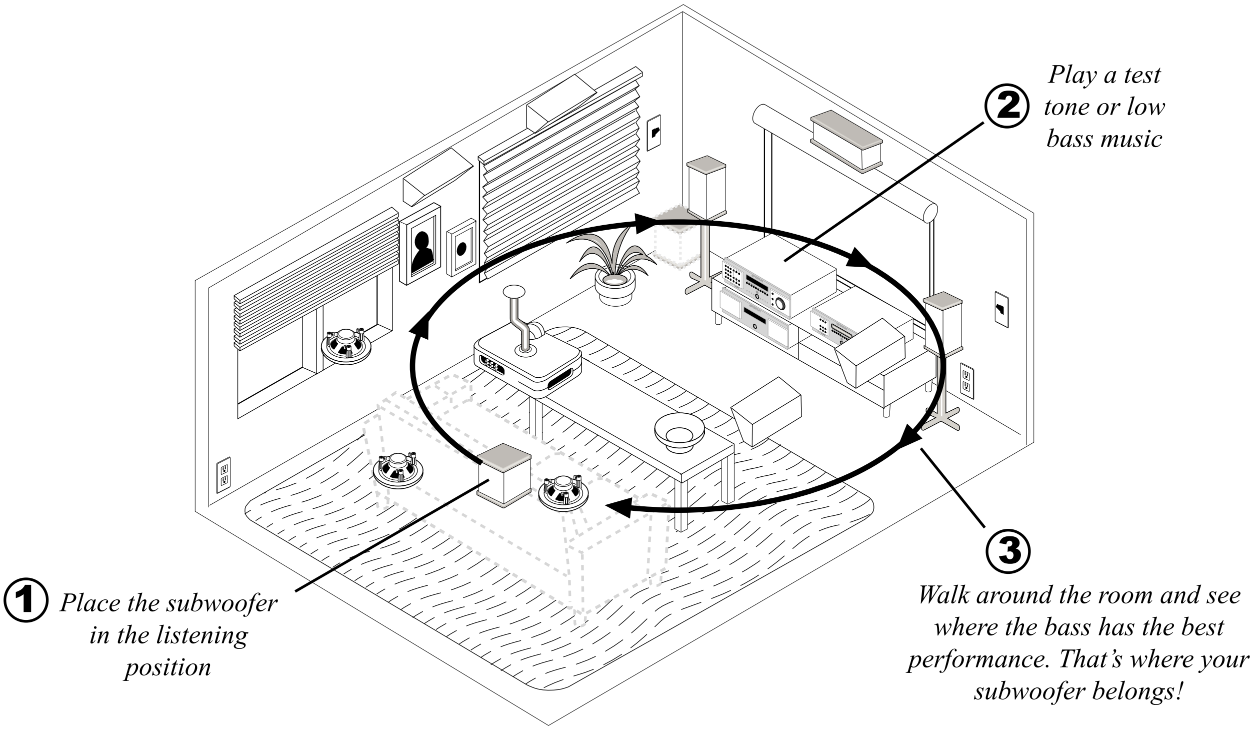
The best location for a single subwoofer can be found by playing a couple of different low frequency test tones (or some music with heavy sustained bass passages) and proceeding with the following easy 1-2-3 process:

*1. Place the subwoofer right on the seat of your couch or listening chair.*

*2. You can then either run the calibration (noise) signal through it, or simply plug the analog outputs of a CD player directly into your subwoofer's low-level inputs. Turn down the subwoofer's volume level before turning on the CD, then play the test tones or some music with heavy sustained bass passages.*

*3. Walk around the room, standing in all the positions where you might be able to place the subwoofer. Again, this is usually near the corners of the room. Try locations fairly close to the front speakers.*

Notice where in the room the bass output from the subwoofer sounds the loudest. Shut things down and install the subwoofer there. This is the best position for the subwoofer. The bass will sound the best when you are sitting in your normal listening position.


② Play a test tone or low bass music
① Place the subwoofer in the listening position
③ Walk around the room and see where the bass has the best performance. That's where your subwoofer belongs!

If your subwoofer seems to sound best when it is near the front speakers (often the case), keep in mind that most television sets may not react well to the subwoofer if it is not built specifically for use in a home theater application. While most front Left/Center/Right speakers do have shielding when intended for use in a home theater application, subwoofers are not always magnetically shielded and may damage the television if placed too close. If you want to check if this will be a problem, select an unused video input on the television to bring up a single color screen. If you see any color distortion anywhere on the screen, an unshielded speaker is too close to the screen and should be moved away from the television until the color distortion disappears.

*Note - most powered home subwoofers feature a phase control with a range between 0-180 degrees. This is present so that in situations where the optimum location is not particularly desirable, you can locate the subwoofer elsewhere nearby and make a slight adjustment to the phase so that is sound arrives to the listener at the same time as the other speakers. Ideally, sound arriving at the same time is what allows the subwoofer to create the illusion of the main speakers making the bass. This is what enhances the listening experience.*

# Remote Control Codes

## Audio Components

ADC 007
Adcom 082, 092, 225, 161, 269
Aiwa 018, 104, 170, 202, 203, 213, 211, 188
Akai 138, 189
AMC 125, 126, 167, 128, 258, 281, 282
Amend 054
AMX 196
Angstrom 142
Arcam 141
Audio Access 147
Audio Alchemy 135
Audio Design 194, 221, 011
Audio Ease 021, 196, 207
Audio File 071
Audio Matrix 167
Audio Source 273
Audio Technica 134
B&K 096, 097
Bose 070, 170, 224
Bryston 023
Carver 006, 028, 061, 071, 201, 214, 226, 180, 185, 022, 029, 077, 284
Casio 076
Chiro 140
Cinema Sound 034, 134
Citation 148, 272
Clarion 026
Curtis Mathes 076
Denon 002, 034, 109, 215, 229, 230, 027, 037, 234, 259
Eiger 149
Elan 057
Enlightened Audio 099, 098
Fisher 047, 214, 180, 182
Fosgate 062, 231
GE 056, 260
Goldstar 008
Hafler 174
Harman/Kardon 231, 233, 254, 153, 154, 118, 121, 227, 277
Hitachi 020
Inkel 197
JBL 263
JC Penny
Jeff Rowland 206
Jensen 058
JVC 240, 163, 191, 114, 266, 279
Kenwood 026, 066, 145, 146, 181, 190, 197, 192, 182, 199, 151, 222, 180, 005, 280
Kinergetics 220, 140
Koss 216
Krell 150, 072
Kyocera 007
Lexicon 120, 235, 236, 237
Linn 124
Luxman 137, 139, 052, 054, 115, 004, 009
LXI 076, 056
Magnavox 086, 164, 152, 208
Marantz 006, 028, 031, 040, 063, 185, 186, 251, 265
McIntosh 238
MCS 076
Meridian 100, 012, 013
Mitsubishi 242, 243, 204
Mondial 157, 158, 042, 043, 081, 112
Myryad 276
NAD 186, 113, 283
Nakamichi 111, 244, 245, 172, 183
NEC 176
Onkyo 017, 046, 064, 107, 108, 187, 079, 080, 090, 179, 209, 270, 275
Panasonic 032, 195, 219, 177
Parasound 129, 130, 132, 261
Phast 196
Philips 249, 250, 251, 063
Pioneer 014, 033, 039, 044, 045, 050, 069, 159, 168, 116, 035, 079, 198
Proceed 144, 268
RCA 010, 048, 117, 156, 067
Realistic 019, 056, 073, 075, 095
Revox 162
Rotel 074, 083, 085
Samsung 016
Sansui 040, 048, 110, 119, 065, 228
Sanyo 047, 059
Scott 019, 091
Sears 076
Sharp 026, 094, 131, 175, 181
Sherwood 024, 048, 055, 102, 103, 105, 106, 051, 030
Sony 018, 093, 223, 247, 248, 160, 166, 015, 101, 184, 218, 271
Soundesign 036
Soundstream 084, 088
SSI 068
Sumo 171
Sunfire 001, 329
Taekwang 138
Teac 005, 019, 049, 111, 212, 217
Technics 122, 176, 193, 219, 178, 177, 200, 257, 262
Theta 136
Toshiba 060, 087, 198, 278
Wards 180
Yamaha 026, 253, 169, 067, 173, 205, 264, 232, 089, 264, 274, 285
Zenith 143, 210

## Auxiliary Devices

### Lighting Switches, TiVo, Etc.

3M 152
Aiwa 164
Archer 155
Auton 191
DMX 156
Draper Screen 204
Dwin 080
Everquest 206
Extron 151
Faroudja 184

*Fuji 209*
*Jerrold 153*
*JVC 185*
*Kenwood 185*
*Lite-Touch 208*
*Lutron 077, 158, 159*
*Makita 186, 201*
*Mindpath 205*
*Niles 160, 187*
*NSM 161*
*Piano Disc Plus 085*
*Philips 090*
*Polk Audio 162*
*Replay 075*
*Russound 081*
*Scientific Atlanta 156, 163*
*Sima 082*
*Solo Electronics 207*
*Somfy 078, 079*
*Sony 104, 164, 165, 166*
*Starcom 153*
*Turboscan 167*
*Velodyne 203*
*X-10 093, 183*
*Xantech 168, 169, 170, 171, 172, 188, 189*

## Cable Boxes

*ABC 103, 003, 004, 039, 042, 046, 053*
*Americast 099*
*Antronix 014*
*Archer 005, 007, 014*
*Bell South 099*
*Centurion 092*
*Century 007*
*Citizen 007*
*Combano 080, 081*
*Comsat 074*
*Comtronics 030*
*Digicable 101*
*Eagle 020, 030, 040*
*Eastern 057, 066*
*Echostar 106*
*Electricord 032*
*Gemini 008, 054*
*General Electric 072*
*General Instruments 074, 103, 104*
*GNC 099*
*Golden Channel 030*
*Hamlin 049, 050, 055*
*Hitachi 055, 103*
*Jerrold 002, 003, 004, 008, 009, 010, 013, 069, 074*
*Magnavox 010, 012, 064, 079, 094, 095*
*Media One 107*
*Mitsubishi 102*
*Lutron 077, 158, 159*
*Mindpath 205*
*NSM 161*
*Piano Disc Plus 085*
*Philips 090*
*Replay 075*
*Scientific Atlanta 156, 163*
*Sima 082*
*Solo Electronics 207*
*Somfy 078, 079*
*Sony 104, 164, 165, 166*
*Starcom 153*
*Turboscan 167*

## CD Players

*Adcom 062, 042*
*Aiwa 059, 065, 088, 089, 105, 122, 170,187*
*Akai 085, 195, 202*
*AMC 231, 232*
*Amend 118*
*Arcam 238*
*Audio Access 119, 147*
*Audio Ease 165*
*Audio Technica 046*
*BSR 037, 057*
*California Audio 103, 008*
*Capetronic 063*
*Carrera 057, 080*
*Carver 185, 041, 044, 050, 086, 107, 130, 134, 135, 138, 139, 203, 204, 167*
*Casio 111, 182*
*Clarinette 182*
*Creek 159*
*Crown 035*
*Denon 002, 123*
*Emerson 042, 069, 102*
*Fisher 050, 185, 134, 008*
*Fraba 111*
*Genexxa 010, 069, 102*
*Goldstar 010, 069, 102*
*Haitai 093*
*Harman/Kardon 018, 033, 047, 208*
*Hitachi 042, 175*
*Inkel 130, 143, 144*
*JC Penny 014, 061, 092, 141*
*Jensen 158*
*JVC 004, 022, 136, 163, 213, 214, 242, 243*
*Kenwood 185, 007, 023, 055, 071, 072, 142, 137*
*Koss 061*
*Krell 241*
*Kyocera 005*
*Lotte 102*
*Luxman 011, 028, 070, 076*
*LXI 059*
*Magnavox 044, 107*
*Marantz 027, 041, 044, 051, 077, 107, 209*
*McIntosh 212 MCS 014, 073, 092*
*Memorex 010*
*Mission 044, 107*
*Mitsubishi 179*
*Mitsumi 153*
*Modulaire 182*
*Mondial 147*
*Myryad 244*
*NAD 006, 005, 067, 178*
*Nakamichi 217, 218, 219, 095*
*NEC 014, 062*
*Nikko 046*
*NSM 044, 107*
*Onkyo 030, 038, 039, 168, 169*
*Optimus 010, 050, 057, 058, 081, 082, 083, 085, 093, 195*

Panasonic 103, 201, 172, 008, 068
Parasound 233
Philips 041, 044
Pioneer 010, 020, 025, 056, 174, 175, 176
Proceed 239
Proton 044, 107, 228
Quasar 103, 008
Radio Shack 182
RCA 017, 042, 150
Realistic 042, 050, 051, 102, 181, 182, 187
Rotel 044, 107, 161, 178, 250
SAE 044, 107
Sansui 044, 069, 107, 128, 171, 190, 125
Sanyo 050
Scott 069, 102
Sharp 026, 031, 051, 066
Sherwood 003, 019, 051, 096, 112, 115, 119, 166
Signature 033
Sony 048, 081, 097, 126, 133, 177, 225, 226, 164
Soundesign 251
Sumo 155
Sylvania 044, 107
Symphonic 052, 181
Taekwang 195, 085
Tandy 010
Teac 015, 034, 036, 051, 052, 101, 131, 140, 079
Technics 060, 103, 200, 172, 184, 008, 068
Techwood 076
Theta Digital 234, 235
Toshiba 006, 067, 091, 160, 148
Vector Research 080
Victor 004, 022, 114, 124
Wards 185, 033
Yamaha 024, 046, 054, 186, 183, 245
Yorx 182

## DVD Players

Apex Digital 087
Denon 007, 080
GE 026, 027
Harman/Kardon 084 JVC 012
LG 091, 057, 074
Magnavox 066
Marantz 083
Mitsubishi 017
NAD 088
Onkyo 076, 035
Panasonic 021, 042
Philips 066
Pioneer 023, 092
Proceed 086
Proscan 026, 027
RCA 026, 027
Samsung 056, 070
Sharp 094
Sony 033
Theta Digital 032
Thomson 026, 027
Toshiba 035, 034
Yamaha 042, 089
Zenith 057, 074, 091

## Laserdisc Players

(Use with DVD)

Denon 206, 207
Funai 120
Kenwood 152, 013
Magnavox 032, 121
Marantz 211
Mitsubishi 121
NAD 121
Optimus 049, 013
Panasonic 113
Philips 032
Pioneer 106, 117, 121
Radio Shack 120
RCA 002
Realistic 049
Runco 127
Sanyo 075
Sharp 152, 013
Sony 053, 110
Technics 113
Theta Digital 032
Toshiba 152, 106
Yamaha 043, 129

## Satellite/DSS Receivers

Alphastar 123
Amplica 050
Birdview 129, 113, 051, 126
BSR 053
Capetronics 053
Channel Master 013, 014, 015, 018, 036, 055
Chaparral 008, 009, 012, 077 Citoh 054
Curtis Mathes 050
Drake 005, 006, 007, 010, 011, 112, 116, 141, 052
DX Antenna 024, 046, 056, 076
Echostar 038, 040, 057, 058, 093, 094, 095, 096, 097, 098, 099, 100, 122
Electrohome 089
Eurosat 114
Fujitsu 017, 021, 022, 027, 133, 134
General Electric 151, 106, 150
General Instruments 003, 004, 016, 029, 031, 059, 101, 148
Hitachi 139, 140
Home Cable 080, 044, 029
Houston Tracker 033, 037, 039, 104, 057, 051
Hughes 068, 154
Hytek 053
Hyundai 149 I
CR 023
Janiel 060, 147
Kathrein 108
Legend 057
Lutron 132
Luxor 144, 062
Macom 010, 059, 063, 064, 065
Memorex 057
Nextwave 028, 124, 125

*Norsat 069, 070*
*Pace 143*
*Panasonic 142, 060*
*Pansat 121*
*Personal Cable 117*
*Philips 071, 152, 153*
*PL 023, 026*
*President 019, 102*
*Primestar 110, 030*
*Prosat 072*
*Proscan 151, 106, 150*
*RCA 151, 106, 150*
*Realistic 043, 074*
*Samsung 123*
*Satellite Service 028, 035, 047, 085*
*Sony 103*
*Starcast 041*
*Superguide 020, 124, 125*
*Teecom 023, 026, 075, 087, 088, 090, 107, 130, 137*
*Toshiba 002, 127 T*
*own & Country 023, 026*
*Uniden 016, 025, 042, 043, 044, 045, 048, 049, 078, 079, 080, 086,101, 135, 136*
*Viewstar 115*
*Winegard 128, 146*
*Zenith 081, 082, 083, 084, 091, 120*

## Tape Decks

*Aiwa 015, 071, 100, 114*
*Carver 006, 008, 027, 024, 036*
*Denon 105, 227, 229*
*Fisher 064*
*Goldstar 011*
*Harman/Kardon 233*
*JVC 106, 116, 239, 240*
*Kenwood 005, 013, 023, 026, 064, 145, 146, 181, 190*
*Linn 124*
*Luxman 035, 137, 139*
*Magnavox 027*
*Marantz 014, 027, 056, 065, 087*
*McIntosh 238*
*Mitsubishi 242, 243*
*NAD 029, 048*
*Nakamichi 244, 245, 025*
*Onkyo 002, 012, 016, 017, 018, 019, 115*
*Optimus 026, 054, 055*
*Panasonic 007, 010, 032, 088, 195*
*Philips 027, 087*
*Pioneer 003, 039, 047, 050, 066, 098, 222*
*Quasar 007, 088*
*Sansui 027, 113, 119, 224*
*Sharp 026, 057, 131, 175, 181*
*Sherwood 038, 004, 028, 030, 033, 034*
*Sony 020, 022, 052, 084, 089*
*Teac 009, 059, 212*
*Technics 007, 010, 076, 088, 109, 122, 193*
*Toshiba 112*
*Victor 106*
*Yamaha 021, 026, 031, 067, 040*

## Televisions

*Admiral 072, 081, 161, 160*
*Akai 197, 146*
*Amark 112, 143*
*Ampro 073, 167, 157, 183*
*Amstrad 052*
*Anam 043, 054, 056, 080, 112, 131*
*AOC 197, 004, 112, 058*
*Audiovox 076*
*Blaupunkt 088*
*Cairn 201*
*Candle 197, 002, 003, 004*
*Capehart 058*
*Centronic 043*
*Citizen 197, 002, 003, 004, 043, 101, 103, 143*
*Classic 043*
*Concerto 004*
*Contec 043, 050, 051*
*Coronado 143*
*Craig 043, 054*
*Crown 043, 143*
*Curtis Mathes 197, 101, 004, 143*
*CXC 043*
*Daewoo 004, 016, 043, 004, 076, 103, 114, 125, 127, 143*
*Daytron 004, 143*
*Dwin 117*
*Dynasty 043*
*Dynatech 062*
*Eiki 187*
*Electrohome 024, 076, 143, 196*
*Emerson 197, 004, 005, 028, 043, 047, 048, 050, 051, 076, 096, 143, 151, 153, 154, 155*
*Fisher 007, 057*
*Fujitsu 198*
*Funai 028, 043*
*Futuretech 043*
*GE 197, 008, 009, 034, 056, 073, 074, 130, 144, 155, 160, 161, 165, 004, 091, 157, 183*
*Goldstar 004, 102, 106, 112, 113, 116, 119, 127, 143*
*Hall Mark 004*
*Hitachi 004, 009, 010, 011, 012, 023, 075, 143, 158, 163, 166, 072*
*Infinity 164*
*JBL 164*
*JC Penny 197, 004, 008, 009, 024, 030, 065, 101, 143, 156, 160*
*Jensen 013*
*JVC 034, 038, 070, 083, 154, 199*
*KEC 043*
*Kenwood 197, 070*
*Kloss 002, 059*
*KMC 143*
*KTV 197, 043, 143, 154*
*Lodgenet 072*
*Logik 072*
*Luxman 004*
*LXI 166, 007, 015, 052, 081, 160, 164*
*Magnavox 197, 003, 004, 022, 059, 060, 061, 063, 064, 127, 160, 164, 094*
*Marantz 197, 164*
*Matsui 164*
*Memorex 007, 072, 004*

*Metz 088*

*MGA 197, 004, 024, 028, 042*

*Minerva 088*

*Mitsubishi 004, 024, 028, 040, 042, 109, 124, 146, 191*

*MTC 197, 004, 062, 101*

*NAD 015, 025*

*NEC 132, 130, 134, 197, 040, 016, 024, 056, 019*

*Nikei 043*

*Onking 043*

*Onwa 043*

*Optonica 019, 081*

*Orion 096*

*Panasonic 034, 056, 080, 092, 164*

*Philco 197, 003, 024, 056, 059, 060, 063, 064, 164, 004*

*Philips 197, 003, 004, 005, 038, 059, 093, 164, 127*

*Pioneer 197, 018, 023, 025, 116, 135, 190*

*Portland 004, 143*

*Proscan 144, 160, 161, 165, 167*

*Proton 004, 058, 131, 143, 171, 173, 193*

*Quasar 034, 056, 092*

*Radio Shack 019, 043, 143, 004, 127*

*RCA 160, 161, 165, 065, 156, 144, 197, 004, 023, 024, 056, 074, 152*

*Realistic 007, 019, 043, 047*

*Roctec 186*

*Runco 168, 169, 178, 179, 180, 181, 182, 183, 073, 157*

*Sampo 197, 058, 004, 202*

*Samsung 004, 050, 089, 101, 105, 127, 143, 160*

*Sanyo 166, 007, 020, 053, 057, 082, 187*

*Scott 004, 028, 043, 048, 143 Sears 015, 030, 003, 007, 028, 057, 143, 094, 160, 080, 165, 166*

*Seleco 189, 200*

*Sharp 170, 081, 019, 028, 029, 014, 004, 022, 143, 175*

*Siemens 088*

*Signature 072*

*Sony 070, 085, 139, 147, 126, 185, 194*

*Soundesign 004, 028, 003, 043*

*Spectricon 112*

*SSS 004, 043*

*Supre Macy 002*

*Sylvania 197, 003, 059, 060, 063, 064, 164, 044, 160, 127*

*Tandy 081*

*Tatung 056, 062*

*Technics 034, 080*

*Techwood 004*

*Teknika 002, 003, 004, 024, 028, 043, 072, 101, 143*

*Telefunken 037, 046, 086, 087*

*Telerent 072*

*Tera 172 TMK 004*

*Toshiba 007, 015, 030, 040, 062, 101, 138*

*Totevision 143*

*Universal 008, 009*

*Video Concepts 146*

*Vidikron 174, 184, 188, 192*

*Vidtech 994*

*Wards 004, 008, 009, 019, 028, 060, 061, 063, 064, 072, 074, 143, 164, 034*

*Westinghouse 076*

*Yamaha 197, 004*

*York 004*

*Yupiteru 043*

*Zenith 072, 073, 095, 103, 157, 183*

*Zonda 112*

## VCRs

*Aiwa 034, 181*

*Akai 016, 043, 046, 124, 125, 142, 146*

*Ampro 072*

*Anam 031*

*Audio Dynamics 012, 023, 039, 043*

*Brooksonic 035, 037, 129*

*Canon 028, 031*

*Capehart 108*

*Craig 003, 040, 135*

*Curtis Mathes 031, 041*

*Daewoo 005, 007, 010, 065, 108, 110, 111, 112, 116, 117, 119*

*Daytron 108*

*DBX 012, 023, 039, 043*

*Dynatech 034, 053*

*Electrohome 059*

*Emerson 006, 017, 025, 027, 029, 031, 034, 035, 036, 037 046, 101, 129, 131, 138, 153, 162, 116*

*Fisher 003, 008, 009, 010*

*Funai 034*

*GE 031, 063, 072, 107, 109, 144, 147*

*Go Video 132, 136, 155, 040, 115*

*Goldstar 012, 013, 020, 101, 106, 114, 123*

*Harman/Kardon 014, 045*

*Hitachi 004, 018, 026, 034, 043, 063, 137, 150, 160, 013*

*InstantReplay 031 JCL 031*

*JC Penney 012, 013, 015, 040, 066, 101*

*Jensen 043*

*JVC 012, 031, 043, 048, 050, 055, 060, 130, 150, 152*

*Kenwood 014, 048, 034, 106*

*Lloyd 034*

*LXI 003, 009, 017, 034, 106*

*Magin 040*

*Magnavox 031, 034, 041, 067, 068, 156, 164*

*Marantz 012, 031, 067, 069*

*Marta 101*

*Matsui 027, 030*

*MEI 031*

*Memorex 003, 010, 014, 031, 034, 053, 072, 101, 102, 134, 139*

*MGA 045, 046, 059*

*Minolta 013, 020*

*Mitsubishi 013, 020, 045, 046, 051, 059, 061, 142, 151, 049*

*MTC 034, 040*

*Multitech 024, 034*

*NEC 012, 023, 039, 043, 048*

*Nordmende 043*

*Optonica 053, 054*

*Orion 025*

*Panasonic 066, 070, 083, 113, 140, 145, 157, 163, 074*

*Pentax 013, 020, 031, 063*

*Philco 031, 034, 067*

*Philips 031, 034, 054, 067, 071, 101*

*Pilot 101*

*Pioneer 013, 021, 048*

*Portland 108*

*Pulsar 072*

*Quartz 002, 014*

*Quasar 066, 145, 075*

*Radio Shack 123*

*RCA 013, 020, 041, 107, 109, 140, 144, 145, 147, 034, 040, 158*

*Realistic 003, 008, 010, 014, 031, 034, 040, 053, 054, 101*

*Rico 058*

*Runco 148*

*Salora 014*

*Samsung 032, 040, 066, 102, 104, 107, 109, 112, 113, 115, 120, 122, 125*

*Sansui 022, 043, 048, 135*

*Sanyo 003, 007, 010, 014, 134, 102*

*Scott 017, 037, 112, 129, 131*

*Sears 003, 008, 009, 010, 013, 014, 081, 101, 017, 073, 112*

*Sharp 031, 054, 149, 159, 165*

*Shintom 024*

*Signature 034*

*Sony 003, 031, 052, 056, 057, 058, 076, 077, 078, 149, 154*

*Soundesign 034 STS 013*

*Sylvania 031, 034, 059, 067*

*Symphonic 034*

*Tandy 010, 034*

*Tatung 039, 043*

*Teac 034, 039, 043*

*Technics 031, 070*

*Teknika 019, 031, 034, 101*

*Thomas 034*

*TMK 006*

*Toshiba 008, 013, 042, 047, 059, 079, 082, 112, 131, 081*

*Totevision 040, 101*

*Unitech 040*

*Vector Research 012*

*Victor 048*

*Video Concepts 012, 034, 046, 141*

*Videosonic 040*

*Wards 003, 013, 017, 024, 031, 034, 040, 053, 054, 131*

*Yamaha 012, 034, 039, 043*

*Zenith 034, 048, 056, 058, 072, 080, 101*

# Troubleshooting Guide

The Emotiva DMC-1 is expertly designed and built to provide years of trouble-free performance. Most problems that occur can usually be solved by checking your setup or making sure that the audio and video components connected to the processor are on and fully operational.

The following information will help you deal with common setup problems you may experience during normal use of your unit. If problems persist, contact your Emotiva Dealer for help.

### No Sound (from one or more full range speakers)

*Speaker cables may have come undone. Turn off your system and check the cables, and tighten the binding posts.*

*An audio cable may have an internal break.*

*The volume level is low for the channels concerned. Recheck the calibration procedure (page 59).*

*The Mute switch is on.*

*The channel has not been turned on in the Speaker Size Menu (pages 56-57).*

*The correct surround mode is not selected. (Some DVD discs are stereo only).*

Note: In Source Direct mode, only the front left and right speakers are engaged. They must also be set to Large.

### No Subwoofer (or poor output)

*The subwoofer's amplifier is off or its controls are set low.*

*Are all other speakers set to LARGE in the Speaker Size menus?*

*SUB is not switched on in the Speaker Size Menu (page 57).*

*Recheck the calibration procedure (page 59).*

*Adjust the Crossover and check Bass Management (page 60).*

*See pages 76-77 to find the best location for your subwoofer.*

If the bass is weak during Dolby Digital or DTS playback, check the correct audio output is selected in your DVD menu, otherwise it may just play stereo into your DMC-1 and you won't get the true LFE signal to the subwoofer.

### Poor AM Reception

Often one of the main complaints about poor AM reception is that the same AM station can be heard at different frequencies. Check to see is BOTH wires of the AM loop antenna are connected. A loop antenna is required for AM reception, as it forms part of the front-end tuned circuit.

### Poor FM Reception

*The antenna may be incorrectly attached.*

*Station not correctly tuned in, weak or off the air.*

You can improve reception by using external antennas. Some cable TV feeds also offer FM reception.

### Input Selection Problems

If you find that certain inputs cannot be selected, Check the INPUTS menu of the OSD (page 53), and make sure that the input has not been disabled in that particular Zone.

### There is No TV Picture

*Make sure that the video input of your TV monitor is connected to the Main monitor output on the DMC-1 rear panel.*

*Check that your Monitor is selecting its correct video input.*

*Check the video connection from your selected source component into the DMC-1.*

Make sure that you are using the correct video connections. If in doubt, try connecting the video output from your source directly to your TV monitor. This will help you narrow down the problem.

Use only one type of Component Video, S-Video, or Composite Video connection on a given input.. If more than one are present at the same time, the DMC-1 will choose higher quality format and the S-Video and the Composite Video output will be off in this case.

### No Tone Control Functions

Remember that the tone controls are non-functioning whenever the DMC-1 is using the 8-CH input, Source Direct mode, or in Zone 2.

### No Dolby Digital or DTS Playback

*See pages 65-66*

Look for the Dolby Digital or DTS Logo on the source program's box or sleeve. Make sure your player's digital output is set to BITSTREAM for Dolby Digital or DTS. This is often a player's setup menu item, not the disc's menu. Some discs are available with a number of different options, such as Dolby Digital or Dolby Pro Logic. Make sure that you have selected the correct mode from your player's menu. Only digital inputs will work for these modes. Check that your player's digital output is connected to the appropriate corresponding digital input on your DMC-1.

There is no AC-3 RF input connection for Laserdisc players. You will need an external RF demodulator.

Check the calibration procedure from time to time. This is an excellent way of checking that all speakers are working correctly.

Noise bursts are heard when DTS encoded CDs or LDs are played. Compressed DTS data uses the normal digital audio tracks of CDs and LDs. This analog noise may be heard in your system before the DTS digital signal is locked on, or it may appear as a background hiss. To reduce or prevent this noise, disconnect any analog connections to your CD, DVD, or Laserdisc players. Just use the Digital connections and see if this addresses the problem.

### No On Screen Display

*See page 50 and 61*

Press the remote's **MENU** button to activate the OSD. It should be present even when no video source has been selected. Remember, there is no OSD "Pop Up" for component video connections.

Sound drops out with CD or DVD playback

*Make sure the disc is not dirty or scratched.*

Some inexpensive players and changers tend to mistrack more often, causing dropouts with an external DAC.

### Remote Won't Learn Commands or Codes

*See page 45*

*Make sure you are pointing the original remote into the receiving window of the Emotiva remote. This is located on the top edge of the remote.*

*Try touching and holding the first button to be learned.*

*Do not do the learn procedure in bright lighting or sunlight.*

*Make sure the Emotiva remote is correctly in its LEARN mode.*

*Make sure the batteries in the remote are fully charged.*

*Try varying the distance between the remotes from 1 to 2 inches, and see if the learn procedure improves.*

### Remote Not Working

*See pages 43-49*

*Make sure the batteries are not dead, or installed incorrectly.*

*Make sure the remote is set on the correct device display for the component you are trying to control.*

*Make sure that the buttons have not been erased or learned over.*

*Make sure that the DMC-1 front panel receiver window is not obstructed.*

*Check that the front or rear IR receivers have not been turned off in the OSD CONTROL menu.*

### ZONE 2 Not Working

*See pages 43 and 55*

Zone 2 is set "disabled" from the factory, so you must use the OSD Zone 2 menu on page XX to enable it when you are ready to use it. This enables Zone 2, but it does not turn it on.

Once Zone 2 is enabled, use the remote control's Zone 2 device button, followed by the Power button to turn Zone 2 on. Alternatively, press the front panel Zone 2 button, followed by the main Power button. The front panel (left hand side) Zone 2 Power light will be on when the zone is active (i.e. engaged and on). The Zone 2 Adjust light turns on when the zone is being adjusted. For example, if you turn Zone 2 on with the remote, and adjust the volume, Zone 2's volume changes, and the Zone 2 Adjust light will be on.

*Zone 2 does not play digital inputs*

Zone 2 can play analog sources independent of what is playing in the Main Zone. It **cannot** play from a digital-only source **unless** that input is selected and playing in the Main Zone. To play a source such as a DVD player in Zone 2 independent of the Main Zone, make sure you connect the player's L/R analog audio output to the DMC-1 too.

### External Amplifier(s) Shut Down (Often or Prematurely)

Check the following:

*Make sure each speaker's average impedance is not less than your amplifiers can safely handle.*

*The amplifier(s) have good ventilation, no vents are covered.*

*Try setting all the speakers to Small, and let your subwoofers handle the heavy bass.*

*Check that the amplifier(s) power output is a good match for your speakers. If your speakers are inefficient, consider using larger power amplifiers.*

*Make sure all wiring is correct and there are no shorts.*

### DMC-1 "Locks Up" (No Response)

*Unplug AC power momentarily, and press Power to turn back on*

*If this does not work, try the reset procedure.*

### Reset Procedure

The DMC-1 is a microprocessor controlled device of great complexity. Occasional power fluctuations and spikes may cause the DMC-1 to "lock up" or act strangely. The DMC-1 can be reset as follows.

*On pages 90-92, write down your calibration settings, input settings, Tuner presets, and any other settings you have made.*

*Press the power button to turn the unit off, or turn it off from the wall for a moment.*

*Press and continue to hold down the front panel Power button and the Tone DOWN button at the same time. The DMC-1 will power on and cycle through the display. Keep holding the buttons down until "Resetting to Factory Defaults" appears in the front panel display. When the DMC-1 has been reset, it will shut off. Turn the DMC-1 back on and it will go to the default screen. It has now been reset. If the DMC-1 has to be reset regularly, you should invest in a good quality AC line conditioner or contact Emotiva for technical support.*

### Problems Updating DMC-1 Firmware

*Check that the serial cable is connected correctly between the DMC-1 and your computer's serial port*

If you have a Palm Pilot™ or similar device with "HotSync™" or its equivalent, you may need to disable this software before proceeding. This software 'seizes' control of a serial port on your machine and prevents the Emotiva software from accessing that port. Use another port or disable HotSync.

For additional information regarding technical issues encountered with updating the firmware of the DMC-1, visit the Emotiva website at www.emotiva.com.

### "Hum" Noises

This problem is more than likely caused by a "ground loop" in your system, rather than a fault in the DMC-1. Follow these steps to isolate the main cause of the hum, there may even be more than one. Remember to turn off all components in your system, including the DMC-1, before disconnecting or connecting any cables.

Disconnect the following items in order, and check each time if the hum has gone away:

*Disconnect all cables which come from outside the room, such as cable TV, satellite TV, or roof top antennas. Make sure that they are disconnected where they first enter the room, so they are making no connection to the DMC-1 or the TV, or any other component. If the hum is caused by the cable TV line, then you will need a "ground loop isolator." This is an inexpensive device fitted in line with the coaxial cable feed. Contact your cable company or your Emotiva Dealer (unless purchased through AV123) for assistance.*

*Disconnect all connections from the DMC-1 to your TV.*

*Disconnect any component which has a grounded power cord.*

If the hum persists, disconnect all the source components one at a time from the back of the DMC-1, until you identify the problem. (Ground loop isolators are available for audio lines and video. Ask your Emotiva Dealer for assistance)

*Try moving the speaker cables away from any power cords. Try just one speaker, connecting it to different channels and see if an amplifier channel is bad.*

If you are still having a problem, remember that Emotiva's dealers and technical support staff will assist you.

### Other Probable Causes of Noise

Speaker noise may also be caused by interference or noise on your AC line. Make sure there are no large appliances sharing the line, or halogen lamps or light-dimming Triac devices.

*Try connecting your system to another AC socket on a separate line.*

*If the hum is heard from within the DMC-1 and not through the speakers, this may also be caused by interference on the AC or DC lines. The power transformers may turn this interference into an audible noise. Internal hum can be made worse by a shelf or cabinet resonating, so try moving the DMC-1 to another shelf.*

*Try moving your components further away from the TV, especially if you ever notice the screen has changed color in the area closest to the component.*

If you have very high efficiency speakers, these may tend to reveal noises which other speakers do not.

# Favorite Settings Log

You can use this section to log your favorite settings from various OSD menus and other preferences controlled by the DMC-1. This will come in handy if the unit is ever powered down for transport or in the event loss of power is unintentional.

| TONE | LEVEL (in dB) |
|---|---|
| ***BASS*** | |
| ***TREBLE*** | |

### Tone Settings

You can reference the TONE SETTINGS on page 53 of this manual.

| MAIN ZONE SETTINGS | SELECTION |
|---|---|
| ***POWER UP SOURCE*** | |
| ***POWER UP VOL. MODE*** | |
| ***POWER UP VOL. LEVEL*** | |
| ***MAX. VOLUME LEVEL*** | |

### Main Zone Settings

You can reference the MAIN ZONE and ZONE 2 SETTINGS on page 55 of this manual.

| ZONE 2 SETTINGS | SELECTION |
|---|---|
| ***ZONE 2 SYSTEM*** | |
| ***BALANCE*** | |
| ***POWER UP SOURCE*** | |
| ***POWER UP VOL. MODE*** | |
| ***POWER UP VOL. LEVEL*** | |
| ***MAX. VOLUME LEVEL*** | |

### Zone 2 Settings

You can reference the MAIN ZONE and ZONE 2 SETTINGS on page 55 of this manual.

| MODE SETTINGS | SELECTION | |
|---|---|---|
| ***DYNAMIC RANGE*** | | |
| ***PL-II MODE*** | | |
| ***PL-II CENTER WIDTH*** | ***II*** | ***IIx*** |
| ***PL-II PANORAMA*** | ***II*** | ***IIx*** |
| ***PL-II DIMENSION*** | ***II*** | ***IIx*** |
| ***DTS LFE*** | | |
| ***DTS NEO:6*** | | |
| ***JAZZ CLUB AMBIENCE*** | | |

### Mode Settings

You can reference the MODE SETTINGS for the signal processing and decoding functions on page 52 of this manual. Be sure to note any different settings between Dolby Pro-Logic II and Dolby Pro-Logic IIx modes where applicable.

| CONTROL SETTINGS | SELECTION |
|---|---|
| ***RS-232 PORT*** | |
| ***REAR MAIN I/R*** | |
| ***REAR ZONE 2 I/R*** | |
| ***FRONT PANEL I/R*** | |

### Control Settings

You can reference the CONTROL SETTINGS on page 62 of this manual.

| VIDEO SETTINGS | SELECTION |
|---|---|
| ***OSD VOL POP-UP*** | |
| ***OSD SOURCE POP-UP*** | |
| ***OSD MODE POP-UP*** | |
| ***VIDEO DEFAULT*** | |
| ***VID2 / MON2*** | |
| ***VIDEO DELAY*** | |

### Video Settings

You can reference the VIDEO SETTINGS on page 61 of this manual.

Input Settings, Remote Codes, and Speaker Settings tables can be found on the next page.

### Input Settings and Remote Codes

You can reference the INPUT SETTINGS on page 53 of this manual. REMOTE CODES are found on pages 78-83. Check off the appropriate boxes, fill in the appropriate information and indicate levels where necessary.

| INPUT JACK | NAME | GAIN TRIM | MAIN ZONE | VIDEO TYPE | TRIG. RLY. | ZONE 2 | MAKE & MODEL | REMOTE CODES | NORM VOL. |
|---|---|---|---|---|---|---|---|---|---|
| *DVD* | | | | | | | | | |
| *CD* | | | | | | | | | |
| *8-CH* | | | | | | | | | |
| *SAT* | | | | | | | | | |
| *VID 1* | | | | | | | | | |
| *VID 2* | | | | | | | | | |
| *TUNER* | | | | | | | | | |
| *TAPE* | | | | | | | | | |
| *PHONO* | | | | | | | | | |

### SPEAKER Settings

You can reference the SPEAKER SETTINGS on pages 56-60 of this manual. TRIM settings can be found on page 51.

| SPEAKER POSITION | CALIBRATION LEVEL (dB) | TRIM LEVEL (dB) | DISTANCE (FEET) | SETTING LG/SM/OFF |
|---|---|---|---|---|
| *LEFT MAIN SPKR* | | | | |
| *CENTER SPKR* | | | | |
| *RIGHT MAIN SPKR* | | | | |
| *RIGHT SURROUND* | | | | |
| *RIGHT SURR BACK* | | | | |
| *LEFT SURR BACK* | | | | |
| *LEFT SURROUND* | | | | |
| *SUBWOOFER* | | | | |

| | |
|---|---|
| *LEFT-RIGHT CROSSOVER FREQUENCY* | *Hz* |
| *CENTER / SURROUND CROSSOVER FREQUENCY* | *Hz* |

# Technical Specifications

**Line Level Inputs**

Sensitivity

(for 0.5 V output): 125mV

Phono: 1.6mV

Frequency Response:

+/- 0.5 dB: 20 Hz-20 kHz

Signal to Noise Ratio

(relative to 2V out): Analog 97 dB

Digital 105 dB

Distortion (THD): <0.03%

Separation (@1kHz): 70dB

Tone Control

Bass: +/- 10dB

Treble: +/- 10dB

**Audio Output Section**

Frequency Response

Main Channels (Large): 20Hz-20kHz

Subwoofer (LFE): 20Hz-160Hz

*(Note - The subwoofer crossover is set at 160Hz. The subwoofer plays the bass from the other channels using the LFE Bass Management function in the signal processing formats)*

Delay Adjustment

Center: 0-25 ms

Rear: 0-25 ms

**Video Section**

Video Inputs/Outputs: 1V p-p, 75 Ohm

Bandwidth

Component Video: 100MHz, -1.5dB

S-Video: 6MHz, -2dB

Composite Video: 18MHz, -1.5dB

(Video transcoder / up converter circuitry is completely automatic)

**FM Tuner Section**

FM Range: 87.5-108MHz

0.2MHz Steps

**Usable FM Sensitivity (Mono)**

1.6uV@75 Ohms

@75kHz 15.2 dBf (DEV 30dB)

50dB Quieting Sensitivity (Stereo)

31.6 uV @75 Ohms

41.2 dBf

Audio Output Bandwidth (+.5, -3dB)

30Hz-15kHz

**AM Tuner Section**

AM Range: 530-1710kHz

10kHz steps

Usable AM Sensitivity (S/N 30% modulated)

@20dB S/N 16uV / (600uV/m)

@1mV input 48dB

**Trigger Outputs**

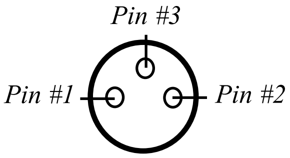
12 Volt MAIN and ZONE2 Trigger

Current load <500mA total

MAIN Zone Trigger Relay Contact Rating

24VDC @ 2a Max

**XLR Outputs**



Pin #1 = Ground

Pin #2 = Positive

Pin #3 = Negative

**Infrared Outputs (Optically Isolated)**

1/8" Jacks @ 12V level

**Power Requirements**

120VAC, 60Hz, 40W

**Dimensions**

17"Wx5.75"Hx15.5"D

**Net Weight**

22 lbs

# Licensing and Trademark Disclosures

## DTS Disclosure

This product is manufactured under license from Digital Theater Systems, Inc. US Patent No 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other worldwide patents issued and pending. "DTS", "DTS-ES Extend Surround", and "Neo:6" are trademarks of Digital Theater Systems, Inc. Copyright 1996-2004 Digital Theater Systems, Inc. All Rights Reserved.

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All Rights Reserved. Emotiva  reserves the right to make improvements to its products at any time. Therefore, the specifications of the product and the specific details of this manual are subject to change at any time.

# Limited Warranty

Emotiva is proud to design and manufacture quality products for the home audio and home theater enthusiast. Your DMC-1 preamplifier has been crafted to perform flawlessly for many years. As a result of this quality and craftsmanship, Emotiva offers the following warranty to owners of the DMC-1.

Emotiva Audio warrants the DMC-1 to be free of defects in materials and workmanship for a period of **FIVE YEARS** from the original date of purchase. The following items are excluded from, or will void this warranty:

*1) Damage to the DMC-1 caused during shipment and handling.*

*2) Damage to the DMC-1 caused by accident, misuse or abusive operation contrary to the instructions specified within this manual.*

*3) DMC-1 units that have had the serial numbers defaced, modified, or removed.*

*4) Damage to the DMC-1 resulting from a modification of, or attempted repair by any person or company not authorized by Emotiva.*

*5) Any DMC-1 unit purchased from a non-authorized dealer.*

*6) The MX500 remote control carries a one year parts and labor warranty from date of original sale. This warranty is subject to the same terms and conditions as outlined in items 1 through 5.*

*7) Emotiva does not assume liability for loss of use, or damage to, associated or connected equipment.*

### Service Assistance for the DMC-1

Please note that BEFORE sending your DMC-1 in for repair, you MUST call Emotiva and obtain a returned material authorization (RMA) number. Before contacting Emotiva to begin the return process, please have as detailed a description of the problem(s) you are experiencing and the conditions under which the problem(s) occur. Additionally, please be sure to check the troubleshooting guide in this manual to rule out the possibility of something simple you may have overlooked. Please remember, this is a complicated product and most instances of perceived product failure are the result of improper set up or operation. Emotiva and its dealers will help you ascertain whether you have an operational problem or product defect.

Once you have obtained the RMA number, you must print this clearly on the outside of the box so it will be possible to determine from whom the DMC-1 came once it arrives at Emotiva. Parcels arriving without an RMA number will be refused and returned freight collect.

Please send your repairs with RMA number to:

**Emotiva**
Attn.: Repair Department
106 Mission Court, Suite 101
Franklin, TN 37067
Reference - (Put your RMA number in this spot)

**Emotiva**
106 Mission Court, Suite 101
Franklin, TN 37067

Tel - (615) 771-1224
(877) EMO-TECH
Fax - (615) 771-1128
Website - www.emotiva.com

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